R0022
S920022

KANE

SILVER INTO GOLD:

THE CLEAR CREEK NATIONAL HISTORIC DISTRICT

LEADVILLE RANGER DISTRICT, SAN ISABEL NATIONAL FOREST

By Allen E. Kane, Forest Archaeologist
Pike and San Isabel National Forests,
1920 Valley Drive, Pueblo, Colorado, 81008
(719)-545-8737; DG:R02F12A

Clemson Class of 1989

November 5, 1990

This paper was prepared as a student project in partial fulfillment of the requirements of the Professional Development for Outdoor Recreation Management at Clemson University. It in no way reflects USDA Forest Service policy nor are the opinions expressed those of anyone other than the author.

ABSTRACT

In order to meet increasing public demand, outdoor recreation opportunities offered by the National Forests should be expanded and diversified. Integration of archeological and historical resources in new recreation experiences is one avenue the Forest Service can pursue to meet the greater awareness and expectations of the modern visitor. The San Isabel National Forest in the Colorado Rockies manages historic mining boom resources that can be restored, interpreted, and marketed as the focus of new recreation initiatives. One possible cultural resources recreation opportunity is Clear Creek Canyon, where ghost towns and abandoned silver mines are preserved as a record of the 19th century gold and silver rush. This paper argues for the development of a Windows on the Past Clear Creek National Historic District; the project would focus on interpretation of and first hand experiences with the cultural and natural history of the area, which has an exhilarating high country setting. Critical areas in terms of project success are forecast as customer demand and supply, quality and flexibility of recreation product, marketing, and effective partnership networking. The project offers the recreation manager a challenge to design and implement innovative measures to protect cultural resources and to tailor interpretation to the varied interest of the public customer. Several alternatives for developing the project are suggested as a means of garnering public response and involvement. Clear Creek is conceived as a National Recreation Strategies project whereby product quality and customer satisfaction are emphasized.

KEYWORDS: historic district, windows on the past, urban forests, marketing, partnerships, recreation opportunities, cultural resource management, cultural resource protection, interpretation.

TABLE OF CONTENTS

LIST OF FIGURES....iii

EXECUTIVE SUMMARY....iv

I. INTRODUCTION....1

A. New Directions for Federal Cultural Resources Management....1

B. Forest Opportunities....2

C. Goals of this Paper....3

II. THE SETTING....4

A. Natural Setting....4

B. Historic Setting....4

C. Outdoor Recreation Setting....6

D. Management History....7

E. Current Management Approaches....8

III. PROJECT GOALS AND DESIGN CRITERIA....8

A. The Opportunity and Forest Service Management Goals....8

B. Criteria for Project Design....10

C. Measuring Project Success....12

IV. DISCUSSION/ANALYSIS....13

A. Factors Influencing Success....13

B. Customer Demand....13

C. Customer Supply....14

D. Products....16

E. Marketing....18

F. Partnerships....19

V. MANAGEMENT AND USE PLAN....21

VI. INTERPRETATION....22

VII. CULTURAL RESOURCES MANAGEMENT....23

VIII. IMPACTS....26

IX. ALTERNATIVES....29

X. WORK PLAN....31

XI. SUMMARY AND CONCLUSION....32

ACKNOWLEDGEMENTS....34

REFERENCES CITED....35

APPENDIX A. Marketing Plan Outline....A-1

APPENDIX B. Preliminary Listing of Developed Sites....B-1

APPENDIX C. Interpretive Plan Outline....C-1

LIST OF FIGURES

ALL FIGURES are contained in the map packet after the main text of this document.

FIGURE 1. Road map of Colorado showing locations of Clear Creek, potential market areas, and customer contact points.

FIGURE 2. 1:24,000 scale map of the Clear Creek area showing natural setting and preliminary locations of visitor attractions and facilities.

FIGURE 3. 1:125,000 scale map of Clear Creek illustrating current management mosaic according to the Forest Plan.

FIGURE 4. 1:125,000 (National Forest) map showing Clear Creek and public recreation opportunities in the Upper Arkansas area

PHOTOGRAPHS of the cultural resources of Clear Creek are contained in the preliminary developed sites listing in APPENDIX B.

EXECUTIVE SUMMARY

Our nation's outdoor recreation program is at a watershed point in its history of plentiful opportunities for all Americans. Experiences at our traditional public recreating locations are being diminished by increasing visitor densities which threaten to overload capacities. This is a potentially critical supply problem which must be addressed by the major federal agencies providing outdoor recreation programs. New initiatives in the National Forests to increase and improve public recreation, that is, programs that are integral to the National Recreation Strategy, are prime opportunities for cultural resources managers to discard their outmoded trappings - we can make a major contribution in improving the nation's outdoor recreation programs. The days of short sighted protectionism and hiding resource locations are over; we must embrace a new credo - Windows on the Past and opportunities for the common man and woman, and their families and friends, to experience their historic and archeological heritage. New vistas in archeology and history will give the visitor greater enjoyment in experiencing America's outdoors, and increase his/her knowledge and appreciation of our country's spectacular heritage. A more recreation fulfilled and enlightened citizenry will result in more productive and happy Americans. Currently, opportunities for experiencing cultural resources in an outdoor recreation setting are limited; the primary public provider is our system of national parks, monuments and recreation areas. But, there are almost countless additional opportunities on other public lands. The National Forest system includes a great number and variety of cultural resources that can be used as the basis for new experiences. Each National Forest contains its own unique blend of cultural resources which contributes to the nation's heritage. This unit, the Pike and San Isabel National Forests, potentially can provide some spectacular American heritage recreation experiences, especially in association with the history of the Santa Fe Trail, and with the 19th century frontier gold and silver rush to the Colorado Rockies. Clear Creek Canyon, a pristine mountain valley with superb scenic vistas and natural environments, and with picturesque remnants of the silver boom, is proposed as the location of an initiative to provide a new high quality recreation experience in the Colorado high country. This is an opportunity for our visitors to relive history and experience the American Heritage in a spectacular Rocky Mountain setting.

The Clear Creek project is one facet of a larger cultural resources enhancement effort focusing on the resources of the Upper Arkansas River area near the Continental Divide in central Colorado. The project should be a significant contribution to the recreation opportunities in this area; it will be designed to effectively serve nearby urban populations, visitors from more distant areas, and the special visitor who needs a little extra consideration to make his/her visit a memorable and pleasurable experience. The project will focus on the record of the late 19th century "Rush to the Rockies" Silver Boom, but also will highlight local alpine scenery and natural resources. Internal partners will be recruited for their expertise in natural resources management, and the project is designed to further national initiatives in wildlife, fisheries, and forestry. Several measures are important in achieving project success; these are quality of visitor experience, manageable, yet productive visitor densities, and cost effectiveness. Success can be achieved by adequately addressing several design criteria: customer demand and supply, marketing, products, and partnerships. In terms of national trends in outdoor recreation demand and supply, demands for high quality services and facilities are increasing; some opportunities, especially popular attractions near urban areas, are in short supply. The Clear Creek project is designed to address these supply and demand needs. The Pike and San Isabel is an urban forest and has adequate potential markets, especially in traditional visitors to the Upper Arkansas, in potential new urban markets, and in out-of-state areas. One proposed design tool for the project is a product matrix which will array the desires of market segments against resource opportunities. The matrix is conceived as a means of insuring a proper fit of demand and product. Customer supply/demand and adequate product mix imply effective marketing, and development of a dynamic marketing plan for the project is critical. The Forest Service has been characterized as an internally-focused organization, and should become externally (customer) focused to meet the recreation need of the American people. Development of an effective partnership network is a final critical design aspect of the project. Committed project partners can be effective by providing a broad financial and human resource base, by increasing the quality of offered products, and by widening market population segments. The project planners should actively encourage

internal partners, and seek external partnerships with other public agencies and private organizations. Other important parts of the project are development of a comprehensive management and use plan, cultural resources management, and effective interpretation. The project should aid in management of significant cultural resources through active maintenance of historic structures and their historic setting. Vandalism is a concern; however, prominent featuring of the historic preservation message in interpretation should be a determent.

As the first step in the scoping process to gather public input for the project, it will be necessary to develop some management alternatives. It is suggested that Clear Creek alternatives could be in the form of a range of facilities and services from minimal to full scale. Suggested individual alternatives are no action, minimum investment, moderate investment, and high investment. The moderate investment option, which includes provision of a full range of experiences and services but retains most aspects of the natural setting, is recommended as the preferred alternative. The Clear Creek Historic District is an opportunity for National Forest managers to discard the old paradigms of protectionism and internally focused management, and make the transition to cultural sites as public heritage resources. Clear Creek is envisioned as the vanguard of a new breed of cultural resources recreation initiatives which feature high quality facilities and services, and emphasize marketing and partnerships as key components for success. We should seize this opportunity to implement new enlightened management directions and turn from functioning as obstructive elitists to champions of the nation's heritage for the people.

SILVER INTO GOLD:

THE CLEAR CREEK NATIONAL HISTORIC DISTRICT

I. INTRODUCTION

NEW DIRECTIONS FOR FEDERAL CULTURAL RESOURCES MANAGEMENT. A new paradigm is emerging in the principles and practice of federal cultural resources management. Public participation in and enjoyment of the archeology and history of the nation is an exciting new perspective for federal recreation managers. This more positive and rewarding approach is replacing the outmoded concept whereby historical and archeological sites have been zealously protected for the use of the academic few and hidden from the public many. This myopic protectionism has only resulted in the gradual deterioration of the resource and the neglect of cultural resources in federal agency management budgets. Why provide funding for resources that are reserved for the elite few and are best managed by hiding their location? Of course, the determined vandal and looter will discover the locations of vulnerable resources regardless of the manager's best protection attempts, but that is a different story.

The new paradigm emphasizes the involvement of individuals and groups (people!) in archeology and the American heritage. This involvement includes a range of activities from enjoying cultural resources during outdoor recreation pursuits, to participating in planning agency projects that affect cultural resources, and adopting archeological sites and providing for their protection. After all, the public is paying for the federal programs that address these resources; it is fitting that it should have a larger role in their management and disposition. Most federal land management agencies including the Bureau of Land Management, the Department of Defense, the Fish and Wildlife Service, and many others, are responsible for a portion of the nation's historic and archeological heritage. The National Park Service quite properly has the lead role in cultural resources administration, in protecting the most valuable national heritage resources, and in providing for public awareness and visitation. National Park Service cultural properties include the most spectacular and scientifically important records of our pre-Columbian heritage (for example, Mesa Verde National Park and Chaco Canyon National Historic Park in the Southwest), and the landmarks of our nation's history (the Revolutionary and Civil War battlefields in the East and South, and the National Trail System in the Midwest and West). These are resources that are vital to our American heritage, to be sure, but the National Park Service system necessarily is focused on the limited set of archeological and historic properties that represent the most prominent events in our history and our best archeological preserves. However, for our publics to fully comprehend the broad flows and regional trends in our history, it is contingent on federal land managing agencies to provide a broader spectrum of events, places, and people that fully represents the American heritage.

We in the Forest Service have a unique opportunity to furnish this wider perspective, and to flesh out the basic framework provided by the Park Service. The National Forest system preserves many of the smaller and less prominent locations that are integral to full appreciation of our American heritage. The workings and homes of the '49er and '59er itinerant prospector, the transient Italian or Chinese railroad construction worker, the tie hacker and small scale logger, the prehistoric pithouse dweller, and the nomadic Plains horse warrior, the buffalo hunter and the High Plains sodbuster, and the bootlegger, claim jumper, and timber rustler are all there. Rather than hiding and "preserving" these resources (preserving them for what?), we can serve the public and promote appreciation of our American heritage by incorporating these resources into the vast arena of National Forest recreation opportunities and experiences. Our cultural resources may not be as spectacular as those of the Park Service, but they often are located in pristine and scenic backcountry setting that can provide alternative, less structured experiences for the recreation visitor. Current Forest Service initiatives that encourage public enjoyment and appreciation of cultural resources like the "Windows on the Past" program are a foot in the door in this direction. We must have the vision to widen our Windows into a

bright vista of American heritage recreation experiences. The renewed emphasis on high quality recreation in our National Forest and the associated Windows program are the chances for Forest Service cultural resources managers to emerge from the cocoon of misguided and futile protectionism and enter the mainstream of American outdoor recreation. Our new credo should be archeology and history by and for the American people.

FOREST OPPORTUNITIES. How can we as unit managers apply this new philosophy to our own regions, forests, and districts? I feel that we as unit managers can contribute much to public enjoyment and appreciation of our Nation's archeology and history. The high peaks, lush alpine meadows, and broad river valleys of our forests were first the homes and hunting grounds of First American tribes and then the destination of early European explorers and Mountain Men eager to exploit the resources of the great American Frontier. Speaking of our Rocky Mountain Region in particular, our forests and prairies were home to the horse-mounted nomads of the High Plains, to the pueblo-dwelling Anasazi, and to foraging groups especially adapted to alpine and foothill environments. Soon after the establishment of the nation, Europeans were attracted to the west by the lure of beaver pelts and rumors of stream banks sparkling with gold nuggets. The early trickle of "civilized" men soon became a flood; the western gold and silver fields were the destination of the '59ers and our Rocky Mountain forests bear the still visible traces of the great mining boom that forged the history of Colorado and other western states. Most of the historic phenomena in our forests are related to the 19th century rush for riches in the vast western High Country. The easily-discovered mine shafts, cabins, and prospect holes reflect the activity of the independent miner hoping to strike the mother lode. The forgotten ghost towns represent the men of commerce and the smaller entrepreneur who also hoped to make a fortune in the boom atmosphere. The abandoned railroad grades, trestles, and tunnels mark the efforts of other entrepreneurs to service the markets of the remote mines and frontier settlements, and the old stumps, charcoal piles, partially cut railroad ties, and sawdust piles reflect the efforts of early loggers to supply the mines and boom towns with construction timbers and fuel for the smelter furnaces. This record of the mining boom is an opportunity for the National Forest visitor to experience at first hand the flavor of the western frontier and to relive the trials, triumphs and disappoints of these early pioneer men and women. One of the most spectacular and productive centers of the 19th century silver and gold rush is the Leadville area in Colorado near the Crest of the Continent (the backbone of the Rocky Mountains along the Continental Divide). While Leadville was the center of commerce, many of the most productive mines and satellite boom towns are tucked away in the folds of the Crest, now the heart of the San Isabel National Forest. The picturesque mines and ghost towns in the spectacular setting of the Colorado high country are a wonderful opportunity for the Forest Service and its customers; they are literally a chance to turn the relics of the Silver Boom into a recreational gold mine.

GOALS OF THIS PAPER. The primary goal in preparing this paper is to persuade key players and potential partners (the Leadville District Ranger, the Forest Supervisor, the San Isabel Forest recreation staff, potential internal partners, and recreation and other staff at the Rocky Mountain Region) that a cultural resource focused recreation initiative in the Clear Creek area is both desirable and feasible. Thus, this report is intended to be a recreation initiative "white paper" informing key Forest Service personnel, other federal and state agencies, and interested members of the public regarding the proposed initiative, possible alternative means of realizing the opportunity, and a recommended course of action. This paper is intended to be a springboard for stimulating interest in the project; ultimately, portions of the paper can be incorporated into a National Environmental Policy Act (NEPA) study to determine whether such a project is desirable and feasible and what form it should take.

Rather than attempting to draft a comprehensive cultural resources enhancement plan for the many possibilities in the Upper Arkansas area (this includes portions of three ranger districts on two national forests and over 1500 square miles of National Forest and other public and privately owned land), this white paper only will address one of the many recreation management opportunities within this area of spectacular alpine settings and picturesque historic resources. However, the Clear Creek project is conceived as only one part of a larger scale cultural resources plan for the Upper Arkansas area focused on the 19th century mining boom and life on the frontier.

In summary the general purpose of this paper is to propose Clear Creek as the location of a outdoor recreation enhancement project featuring local cultural resources, especially the old silver mines and ghost towns associated with the Leadville mining boom. Some more specific objectives of the paper are as follows:

(1) to acquaint unit managers with the opportunity to provide a high quality recreation experience for the visitor with emphasis on cultural resources;

(2) to propose Clear Creek as an example of how the Forest Service can help in easing the pressure on America's outdoor recreation resources, and provide alternative experiences;

(3) to assess the viability of the project in today's federal outdoor recreation clime;

(4) to suggest some management strategies and initiatives to increase the success potential of the project;

(5) To identify some pitfalls of the project and how they might be overcome;

(6) To suggest the basic components of a Management and Use Plan, a Marketing Plan and an Interpretive Plan for the Clear Creek project.

II. THE SETTING

NATURAL SETTING. Clear Creek is located just east of the Continental Divide in central Colorado, on the Leadville Ranger District, San Isabel National Forest. It is readily accessible from the Colorado Front Range urban corridor, being within a three hour driving time from the burgeoning metropolises of Denver and Colorado Springs (refer to Colorado Highway Map - figure 1 - in the map pocket at the end of this document). Clear Creek is a western tributary of the upper Arkansas River and forms a precipitous and visually spectacular canyon between its source high on the Continental Divide and its confluence with the river (refer to 1:24,000 scale USGS quadrangle map of site area, figure 2 in map pocket). In its fifteen mile length, the creek traverses the complete range of central Rocky Mountain life zones including alpine tundra, boreal spruce-pine forest, mixed conifer-aspen forest, montane grasslands, and a riparian community along the water course; elevations within the drainage area range from over 12,000 feet at the alpine lakes nestled just below the Divide to less than 9,000 ft. near the Arkansas River. Perched on the north and south sides of the canyon are rugged spurs of the Continental Divide including several 14,000 foot peaks - Mount Huron, Missouri Mountain, Mount Belford and Mount Oxford on the south and 14,340 ft. La Plata Peak (the sixth highest mountain in Colorado) on the north. Bounding the Clear Creek drainage on the south, west, and north is the Collegiate Peaks Wilderness, encompassing the heart of the highest mountain range in the continental United States. Clear Creek canyon is truly the Hall of the Mountain King and provides an exhilarating setting to the recreational visitor.

HISTORIC SETTING. Despite its rugged topography and rigorous climate, the Clear Creek area has not been forsaken by the always tenacious human species. Prehistoric man camped and hunted in the canyon proper and on the surrounding high peaks during the short warm summers, and exploited the variety of natural resources to fill his larder for the long lean months of winter. The broad flats in the eastern portion of the canyon would have provided select camping locations for prehistoric groups, and, in fact, several of the low ridges common in this area exhibit the small colorful flakes which are the telltale signs of prehistoric habitation. There also are several yellow-bark ponderosa trees in the vicinity which have 150 year old scars near chest level. These scars reflect the prehistoric practice of peeling the bark from ponderosa pine to obtain the cambium layer, which was used both as a food staple and as medicinal treatments.

The idyllic (?) life of these Stone Age peoples was interrupted in the late decades of the 19th century by an avalanche of roughneck prospectors and opportunists who invaded the Colorado high country from the more settled eastern parts of the country. These newcomers braved the wilderness in hopes of striking it rich in the gold and silver fields of the just-organized Colorado Territory. Clear Creek boomed in the '80s and '90s but went bust quickly after the Silver Panic of '93 and the exhaustion of the accessible lodes by 1920. The initial prospectors were after gold rather than silver and established extensive hydraulic mining operations focused on the extensive glacial deposits north of Clear Creek. These operations were initiated in the early 1860s and continued for several decades. Virtually all of the ridges west of Granite and the stream deposits along Cache Creek were processed by the hydraulic method by the Twin Lakes Hydraulic Gold Mining Syndicate Ltd., a British firm, and other hastily organized companies. To increase the volume of water in the hydraulic hoses, Twin Lakes Hydraulic engineers diverted the waters of both Clear Creek and Lake Creek to the north, and conveyed the captured water to the Cache Creek area by means of the Clear Creek and Arlington Ditches. These ditches, completed in 1882, incorporated spectacular tunnels and flumes, many of which survive and are still visible today. The Clear Creek Ditch was used as a short cut by Clear Creek resident when they wanted to make a quick hike into Granite; unfortunately, the ditch trail was slick and treacherous and several victims perished when they fell from the ditch side into the canyon (Leadville Ranger District 1974).

Clear Creek Canyon itself remained relatively quiet during the first years of the mining boom; a gold mining district was established near the east end of the canyon in 1867, but the placer deposits soon played out and the district was abandoned. The canyon was re-prospected for silver in 1879, and in 1880, rich strikes were made at the head of the canyon on Winfield Peak, and on the south slopes of Mt. Hope north of the central part of the canyon. The prospectors could not consolidate their claims during the hard winter of 1880, but during the spring of 1881, a veritable flood of people hoping to strike it rich swarmed into the canyon. The embryo boom towns of Beaver City, Vicksburg, Rockdale, and Winfield (NOTE: photographs illustrating the historic resources of Clear Creek are located in the preliminary list of developed sites, Appendix B.) sprang up near promising claim areas. Beaver City and Rockdale never amounted to much, but by 1882 Vicksburg had about forty cabin residences, two saloons, two hotels, a general store, a boarding house, assay office, livery stable, smithy, and post office, to serve a population of about 150 (Rowe and Rowe 1976). Winfield, to the west at the head of the canyon, also was laid out in 1881 and boasted 150 residents by the end of the year. The district's only smelter, operated by the Union Redwood Company of Leadville, was constructed at Winfield and ran successfully for three years.

The Clear Creek mining district boomed in the mid-1880s, and in 1885 Vicksburg attained its peak population of 500; Winfield had its heyday a few years later with an estimated population of 1500 in the early 1890s (Rowe and Rowe 1976). A stage line served the canyon communities and a daily run was made from the railroad station at Granite. It took two hours by stage from the station to Vicksburg and another hour to Winfield. The most prominent mines in the district were the Silver Plume near Vicksburg which assayed at 259 ounces of silver per ton of ore, and then moving west up the canyon, the Rockdale and Swiss Boy mines running 1400 and nearly 2000 ounces per ton respectively, and the Banker, Free Republic, Fortune, and Tasmania mines on the slopes surrounding Winfield. Production from the mines was unfortunately short lived and dwindled rapidly in the 1890s; another serious blow to local operations was the Silver Panic of 1893 which sent prices plummeting. Most residents had moved elsewhere by 1900, but there was a rich strike at the Tasmania in 1901 which resulted in a short flurry of renewed activity. The last ore was shipped to Leadville via wagon in 1918.

Since the virtual cessation of mining activities, the canyon has seen relatively few commodity-related activities. Some of the miners' cabins have been converted to summer homes, but all commercial enterprises associated with silver and gold mining have been closed down or moved to other locations. Currently, few people live in the canyon, and the largest human intrusion into the canyon is by the summer recreational visitor, who tours the canyon in no great numbers.

Partially through happenstance and partially through the efforts of local citizens, the physical remains of the mining boom in Clear Creek have been preserved. The ghost communities of Beaver City, Vicksburg, and Winfield endure and reflect the areas of greatest activity within the canyon. The Clear Creek Flume is a testament to the practice of hydraulic gold mining whereby megatons of terrace gravels were washed away in search of the elusive gold nugget. And, high on the flanks of the valley, often in precarious perches more suitable to eagles than men, are the dormant silver mines that provided the stimulus to the hard rock miner, the fledgling capitalist, and the swindler. Most of the lands in the canyon were not patented by the mining firms, and later they became part of the San Isabel National Forest. The managers of the Forest have conserved the canyon and its setting, perhaps not through deliberate action, but rather because the canyon offers few other opportunities for economically profitable development or exploitation. Thus, the abandoned silver mines, ghost towns and mining-related structures and objects of Clear Creek are to a large extent preserved, and constitute the one of the best records of the silver boom still preserved in the Rocky Mountain region.

OUTDOOR RECREATION SETTING. A variety of outdoor recreation experiences is available to the visitor to the Upper Arkansas and the northern portion of the San Isabel National Forest. Opportunities vary according to season, and most opportunities are in the primitive and semiprimitive dispersed portion of the spectrum, although some opportunities for developed and organized recreation also exist. The primary recreation opportunities for the visitor are depicted in figure 4 (oversized map located in map folder). Three federally designated Wildernesses are conveniently accessible; these are from north to south, the Holy Cross Wilderness, the Mt. Massive Wilderness, and the Collegiate Peaks Wilderness (numbers 1, 2, and 3 on figure 4). These wildernesses and adjacent undeveloped lands contain the largest concentration of 14,000 foot peaks in the continental United States. These peaks attract a specialized segment of the recreation market, the climber and high peak trophy hunter. Mt. Elbert, the highest peak in Colorado and the second highest in the continental U.S., is only a short distance north of Clear Creek (number 4 on figure 4). The Upper Arkansas also offers other dispersed recreation opportunities such as destination hiking on the Continental Divide and Colorado Trails, and shorter hikes on the numerous Forest Service trails (numbers 15 and 16 in figure 4), recreational fishing in the Arkansas River and its larger tributaries, four-wheel drive jeep road touring, wildlife viewing (especially during the spring and fall seasons), aspen viewing during the fall, and cross-country skiing and snowmobiling during winter.

In terms of public developed recreation opportunities, the Leadville and Salida Districts of the Forest provide several large campground complexes; these include from north to south, the Turquoise Lake Recreation Area, the Twin Lakes campgrounds, and the Cottonwood Lake Recreation Area (respectively numbers 5-7 in figure 4). These campgrounds, and those in the Chalk Creek drainage further to the south, are within an easy one hour drive of the proposed historic district. Ski Cooper, a developed winter recreation site with emphasis on downhill skiing, is located at the northern end of the Upper Arkansas at Tennessee Pass (number 9 in figure 4). A different type of outdoor recreation experience is available by visiting the Arkansas Headwaters Recreation Area (dashed outline and number 12 in figure 4). This public park was created recently through an agreement between the Colorado Department of Parks and Outdoor Recreation and the Bureau of Land Management. The agreement creates a fifty mile corridor of free-flowing stream for rafters, kayakers, fishermen, and other segments of the outdoor recreating public.

Privately-operated recreation facilities also are available in the Upper Arkansas. Several private campgrounds and recreational vehicle parks are available in the Leadville area, and Leadville and Buena Vista provide numerous modern motel and hotel accommodations for the visitor desiring a hot shower after a day in the wilds (numbers 10 and 13 in figure 4). More rustic accommodations are available at Twin Lakes and Granite (6 and 12 in figure 4). Leadville itself offers several attractions associated with mining boom history including the National Mining Museum and Hall of Fame, Healy House and Dexter Cabin state historic properties, and the Tabor Home and Tabor Opera House (Leadville Chamber of Commerce 1987). Alpenglow Excursions conducts guided four-wheel drive tours of the historic mining area just west of Leadville during the clement months. Also, summer excursions are offered on the old Denver, South Park and Pacific Railroad route which runs north from Leadville to Fremont Pass. A varied itinerary of public events to attract the recreation customer

is hosted every year by the Leadville Chamber of Commerce and private businesses in the area. In 1988 the schedule of events ran from May until January and included individual and team competitions in skiing, bicycling, running, and kayaking, living history displays and pageants, a pack burro race, an art festival and the Crystal Carnival winter season celebration.

MANAGEMENT HISTORY. Clear Creek Canyon, and in fact most of the Upper Arkansas public lands administered by the Forest Service, originally were part of the Leadville Forest Reserve (established in 1905) and then the (now defunct) Leadville National Forest. The abandoned towns and mines of the Leadville Forest Reserve were not recognized as a recreation resource, although both Winfield and Vicksburg were described as ghost towns in a 1903 report evaluating the feasibility of a federal timber reserve on the Upper Arkansas (Anonymous 1903). However, the pristine scenic vistas and alpine settings of the Upper Arkansas were extolled and promoted by the Leadville Forest as a visitor's paradise. An early Forest Visitors map (USDA Forest Service 1919) suggested that summer homes, vacation trips, hunting and fishing and camping were appropriate local recreation opportunities. The possibility that the Clear Creek historic mining resources were in themselves a marketable recreation opportunity was first advanced in the late 1960s and early 1970s. During this period, National Register of Historic Places nominations and a comprehensive and ambitious development plan for the area were prepared (Leadville Ranger District 1974), but only a severely scaled down version of the latter was approved. The reasons for this conservative decision were the reluctance of line officers and staff to approve plans perceived as hampering management objectives in other resource areas, and the lack of a strong advocate for cultural resources who could effectively promote these initiatives, and who could explain the real impact or even benefit of the proposed management actions.

CURRENT MANAGEMENT APPROACHES. The project area (Clear Creek Canyon and surrounding high country) is depicted as a mosaic of variable standard management prescriptions according to the Forest Plan (Pike and San Isabel National Forest 1984). Figure 3 and the accompanying key (in map packet at end of this document) illustrates the management prescription mosaic for Clear Creek and nearby areas. Essentially, the canyon bottom is reserved for semiprimitive and rural nonmotorized and motorized recreation, and provision has been made for developed recreation. The mountainous areas on the south, west and north margins of the canyon are reserved for primitive and semiprimitive recreation uses, and the area south of the canyon is in fact a portion of the Collegiate Peaks Wilderness area. Portions of the east-facing lower slopes near the east portion of the Clear Creek area are managed primarily for retention of winter range and forage for big game elk and deer. These current practices do not seem to present any conflicts for the proposed Clear Creek National Historic District and associated construction.

The guide for future recreation management objectives is the Recreation Strategies for the Forest (Vander Kolk 1990). This document specifically cites the Sawatch Range (including Clear Creek) for the abundance of its recreation opportunities ("greater than any other comparable-sized land area within the Pike and San Isabel National Forests or within southeast Colorado.", Ibid:23) and for its 19th century Mining Boom cultural resources. The primary general strategy for the Sawatch area is to perpetuate and enhance its high recreation productivity level by improving services, providing compatible facilities, and increasing visitor satisfaction. Specific objectives for cultural resources and interpretive services include increased public awareness and appreciation of the rich railroad and mining history of the area, and to increase interpretive facilities to include cultural sites and natural history. Thus, a Clear Creek National Historic District initiative would be entirely consistent with the long-term recreation management goals developed for the area.

III. PROJECT GOALS AND DESIGN CRITERIA

THE OPPORTUNITY AND FOREST SERVICE MANAGEMENT GOALS. Historic mining boom resources at Clear Creek offer a rare opportunity for the Forest Service to foster outdoor recreation and to preserve and protect our priceless American heritage. Also, the project allows an opportunity for the public to enjoy complementary natural resources including wilderness and spectacular scenery, wildlife, fisheries, and the forests themselves. To compete effectively in the modern financial clime of limited federal budgets, the Forest Service must demonstrate it is responsive to public demand for quality outdoor recreation experiences; we must become increasingly amenity and service oriented, and less dependent on commodity-oriented management. Clear Creek is an excellent opportunity to advance the threshold of the outdoor recreation opportunities we offer the public customer.

In terms of broad trends, the nation is demanding more outdoor recreation products, especially those incorporating high quality facilities and services, and those involving a physical challenge. The public agencies supplying outdoor recreation opportunities have not been able to keep up with current demand, and the problem is likely to become more acute. Similarly, shortages in the supply of opportunities focused on historic and prehistoric sites are forecast, assuming current trends continue (Cordell et al 1989). The most critical supply pressure points are the most well-known and easily-accessible national parks; the National Park Service maintains some sumptuous and beautiful attractions, but these are in high demand. On recent visits (Kane 1990) to several of our prominent western parks (Mesa Verde, Rocky Mountain, and Carlsbad Caverns) the quality of visitors' experiences was threatened by large crowds which overloaded the attractions and facilities. Rather than running the risk of disappointing prospective visitors by restricting access, the Park Service necessarily has adopted an assembly line approach to visitor management. Tours to the most well-known attractions are tightly scheduled and the visitor closely monitored by Park law enforcement officers; there are a myriad of signs containing scheduling and regulatory information. This evidently is a national problem. A recent article in the Denver Post (1990a) notes record crowds (757,000 visitors in July of 1990) at Yellowstone National Park and increasing visitor disenchantment. According to David Snepenger, a Montana State University professor (quote from the same article), "In marketing terms, the satisfiers - the animals and geysers - are still at Yellowstone, but the dissatisfiers - crowds, not getting a campsite or a meal at lunch - are rising up now. We're talking a city here. We're not talking a wilderness experience." In other words, the modern visitor is confronted with a similar environment to the office he/she is escaping from, and has little opportunity for achieving recreation goals that contribute to self-esteem and self-actualization. Unfortunately, the Park Service approach may be the best solution to a limited supply in the face of overwhelming demand. Other federal and state outdoor recreation providers including the Forest Service must respond by providing alternative recreation experiences in a less fettered environment, and thus relieving some of the pressures on our traditional most well known outdoor recreation resources. Other federal recreation providers including the Forest Service can help mitigate this supply problem by increasing recreation opportunities on their lands. These initiatives would be necessarily smaller in scale, designed for lesser visitor densities, and include opportunities for solitude and experiencing nature. Implementing the Clear Creek project thus would be beneficial in furthering the quality of American outdoor recreation, which is vital to the health of the country. Also, Clear Creek and similar projects can advance Forest Service management goals in several related areas. Some of the specific management benefits of cultural resources enhancement projects for the Pike and San Isabel National Forests are listed as follows.

1. The project will be a contribution to the current recreation initiative within the Forest Service, the National Recreation Strategy, particularly the cultural resources enhancement Windows on the Past program. The National Recreation Strategy is seen as a mid-course correction in recreation management within the agency (USDA Forest Service 1988a). By emphasizing marketing, partnerships with other public agencies and the private sector, and pursuing excellence in the stewardship of recreation resources and customer service, the quality of offered recreational experiences and customer satisfaction are increased. Windows on

the Past is the cultural resources management contribution to the Strategy and emphasizes the interpretation of cultural resources, and public involvement (DeBloois 1988, USDA Forest Service n.d.).

2. The Pike and San Isabel National Forests is designated as an "urban" National Forest. Urban forests are faced with unique management challenges because of their proximity to large urban areas. For recreation managers, these challenges include heavy recreation use, high proportion of day use, user competition for open space and wilderness access, traffic congestion, vandalism, and rowdyism (USDA Forest Service 1988b). The Clear Creek Historic District is an opportunity to respond to the demanding outdoor recreation needs of the urban visitor, specifically the Denver and Colorado Springs metropolitan area markets.

3. The Pike and San Isabel National Forests tentatively will participate in the Below Cost Timber Sale Initiative (BCTI). The BCTI is an experimental program whereby certain National Forests will de-emphasize their timber management programs by no longer preparing and selling commercial timber sales; rather, these forests will increase their recreation-related revenues. This will be done by expanding user fee systems and by providing the public customer with more and better quality recreation experiences. The Clear Creek project will contribute to this national goal. Even if the Congress does not approve the BCTI initiative, Clear Creek will further the new emphasis on amenities and services rather than commodity production and harvest.

4. The Clear Creek project is conceived as a broad multi-resource effort and will further management goals for other resources. National initiatives in timber, wildlife and fisheries management can be furthered through its implementation. Integration of the diverse base of National Forest resources into recreation-focused projects is a means of increasing the range and quality of product offered to the public customer, and at the same time broadening the critical support base. Clear Creek contains numerous natural resource recreation opportunities that can be incorporated into project design.

CRITERIA FOR PROJECT DESIGN. The goals of the Clear Creek project are to provide the public customer with a high quality recreation opportunity combining picturesque historic sites and pristine natural resources. The project is conceived as an alternative to the highly structured outdoor recreation opportunities now characteristic of America's most popular recreation resources. Clear Creek will offer a different experience, both in terms of opportunities for solitude and relaxation, and in freedom of choice regarding schedules and attractions. The project should be designed to satisfy both the customers who wish primarily to experience the wildland settings with only a cursory interest in history, and those who desire a more in depth contact and learning experience with local history. Both day use and longer term visitors should be accommodated. To accomplish project goals, a set of objectives is proposed to function as design criteria during the development of the project. Reference to and awareness of the objectives while designing the project insures a focus on the tangible and interrelated products that will further the Forest Service mission.

1. Develop Clear Creek as the primary focus of a more comprehensive Upper Arkansas cultural resources enhancement initiative; treat both Clear Creek and other initiatives in the Upper Arkansas area as National Recreation Strategy (NRS) Windows on the Past projects. Incorporate the NRS emphases on customer satisfaction and quality recreation experiences. Capitalize on the fascination of the outdoor recreationist for cultural resources: the National Forest customer is eager to visit and learn about the history and archeology of our Forests and experience that closeness with the past that comes from standing in an ancient place or holding an object used hundreds or thousands of years ago (USDA Forest Service n.d.). Ultimately promote Clear Creek as part of a larger recreation package including other mining, railroad, and archeological attractions, and natural history and scenery.

2. Make Clear Creek a cooperative project among the Forest Service, other state and federal agencies, and local businesses and citizens. The Clear Creek National Historic District is fundamentally a project designed to further public enjoyment of Forest resources; thus, the public should be involved in determining the design of the project and, in fact, whether the project is in the public interest. Adopt the "partnerships" concept in conceiving the project and in building a broad base of support; do not design the project solely

as a Forest Service recreation staff initiative. A multi-partner approach will increase the diversity and quality of products available to the public customer and increase the probability of project success.

3. Incorporate marketing as an integral part of the project. Identify market segments in local, regional, national, and international visitor populations; develop and implement means of promoting project products to identified segments. Increase the market through effective and attractive dissemination of information regarding recreation opportunities. This objective can be met through development and implementation of a marketing plan.

4. Build provisions for protection of cultural properties into the project design; instill a sense of appreciation for natural and cultural resources in the visitor. There will be impacts on the resources that constitute the core of the project, and also on peripheral and secondary resources. At individual interpretive sites, a stewardship and appreciation of heritage message should be prominent; interpretive displays will feature the "protect your cultural heritage" message. In order to meet its obligations under federal law and to preserve the quality of visitors' experiences, a regular program of inspection and maintenance should be included in the project's operation.

5. Display the wider range of responsible and responsive Forest Service management including timber, wildlife, riparian areas, and fisheries. Provide interpretive opportunities for the new national initiatives in timber and fish and wildlife management, including Forest Health, Rise to the Future, Watchable Wildlife, and Full Curl. Similarly, promote the image of the Forest Service as a wise and sensitive manager of the public lands. This is a theme that should be consistently represented in the interpretive programs. The Forest Service aura can be emphasized through actual presence of uniformed personnel and through active display of our symbols (Smokey, etc.).

6. Provide a quality recreation experience for all segments of our customer populations. The elderly, physically disadvantaged, and children have special needs that must be considered during the design of recreation opportunities. Recreation and leisure are for everyone and federal legislation including the Rehabilitation Act of 1973 protects the right of disabled citizens to participate in publicly-funded recreation opportunities (Project life 1982). The needs of special populations are best accommodated by building them into the initial planning process and consulting groups that represent special populations during the development of the project.

7. A project of this scale potentially will affect other National Forest resources (wildlife, minerals, timber, etc.) and the people that use these resources. Incorporate the initial scoping procedure and provisions for public input specified in National Environmental Policy Act regulations to deliver a project that will accommodate the wishes and needs of the public sector, and will cause minimum disruption to local residents and businesses.

MEASURING PROJECT SUCCESS. "Success" for the Clear Creek project is providing a consistently high quality recreation experience to the visitor at a reasonable cost. The three basic components of the success equation (quality experience, customers, and costs) can be employed as measures and should be monitored after the project is completed and open to the public.

1. Recreation experience quality. The Clear Creek project is conceived as offering a "showcase" visitor's experience reflecting the NRS emphases on amenities and services. Thus, the facilities and public interfaces must be of consistent high quality; "sweet smelling toilets" (Cron 1989) should be the byword for Clear Creek. The quality of visitors' experiences can be monitored by designing and maintaining a mechanism for public feedback while they are visiting Clear Creek (a suggestion box, distribution of a comment form when they leave the canyon, etc.), and by mail surveys to a sample of customers some weeks or months after their visit.

2. Customers. The project must attract enough public customers to justify the investment in fiscal and human resources, but visitation density must be balanced with maintaining high quality experiences. The overcrowding and increasing customer dissatisfaction at America's premier outdoor recreation resources has been discussed. It is the author's impression that this will be a continuing and increasingly critical trend for the near future and that this can serve as a lesson and an opportunity for the Forest Service. The other side of the coin is that a large investment in the Clear Clear project is unwarranted if there is no public demand for the product. Customer supply/demand statistics can be obtained through estimating the current local, state and national market (through a pre-project marketing survey and an evaluation of recreation trends nationally and locally). An effective marketing strategy can be used to attract a steady flow of customers and enlarge the market if needed. Also, creation of an effective partnership network can aid in developing and expanding markets for the Clear Creek experience.

3. Costs. In this era of increasing costs for facilities and human services and limited federal budgets, an important aspect of this project is cost efficiency and implementing cost-saving strategies for all phases of the project. Ideally, after the initial investment, the project should be self-sustaining, with receipts balancing expenditures. Costs can be controlled by establishing effective partnerships so that costs are shared among several parties, by competing for grants and shared funds that are available for historic preservation, wildlife enhancement and other key components of the project, by enlisting volunteers, and by designating Clear Creek as a fee site. This last strategy may be repugnant to some Forest Service managers, but seems appropriate in this case given the "showcase" aspect of the project. Recent surveys have indicated the outdoor recreation customer's willingness to pay for quality experiences (Task Force on Outdoor Recreation Resources and Opportunities 1988).

IV. DISCUSSION/ANALYSIS

FACTORS INFLUENCING SUCCESS. The focus of this section is to consider the factors which are perceived as determining the success of the project and how the designers of the project might influence or even determine "success". Four areas are viewed as critical in this context: first, is there a sufficient public market locally and within a wider geographical area? Considerations here are whether there is sufficient interest within local communities and/or most distant areas for the products being offered (is there a customer demand), and also whether there are enough seasonal visitors to the Upper Arkansas to make the project viable (is there a customer supply). These supply and demand concerns imply marketing, and an effective marketing plan is a second critical aspect of the project if it is to be a success. A third concern is quality of product; in order to adequately meet demand, a satisfactory quality of product in terms of visitor satisfaction must be offered in a consistent fashion. An attractive mix of products must be offered, the products must be packaged attractively in a suitable and non-detracting setting, and factors that might affect the quality of the product must be monitored. A final critical area for success is partnerships; partnerships are important in lowering unit costs, in effective marketing, and in providing a superior quality product. Thus, a high investment in creating and maintaining an effective partnership network is a critical aspect of the project. These critical areas (customer supply/demand, marketing, product, and partnerships) will be considered in detail in the remainder of this section.

CUSTOMER DEMAND. Outdoor recreation is increasingly viewed by those studying the social aspects of human leisure as a vital activity in relieving the everyday pressures of the workplace and home of the increasingly urbanized American citizen. Outdoor recreation provides the opportunity to meet critical personal and social needs not fulfilled during the workday or by everyday activity (Schreyer n.d.). A. H. Maslow (1954) has proposed a hierarchy of human needs which are (1) physiological necessities, (2) safety, (3) social, (4) self esteem, and (5) self-actualization. The lower order needs (physiology, safety and some social needs) are usually fulfilled by everyday activities, but it is becoming increasingly difficult to fulfill the higher order necessities given the increasing urbanization of the American population and diminishing leisure time. In

order to meet higher-level needs there will be an increasing demand for specialized recreation opportunities especially those with measurable challenges (Schreyer n.d.).

In terms of national trends, the demand for outdoor recreation activities, opportunities, and experiences remains massive among Americans, but the explosive rates of growth monitored in the 50s, 60s and 70s have slowed so that the growth in recreation demand mirrors trends in population (Task Force on Outdoor Recreation Resources and Opportunities 1988. This statistic, based on pre-1988 data, may not reflect recent massive visitor increases at some of the nation's primary public recreation locations as previously documented in this paper.). Demands on remote federal lands are softening, but demands on public lands near population growth centers, especially urban areas, continue to show high rates of increase. Internally, there are also some dynamic shifts in recreation tastes and preferences. The public is taking more recreation goal trips, but the trips are shorter and closer to home. With an increase in urban populations, there is increasing preference for more comfortable and "modern" facilities and services than were the past norm - and a readiness to pay a premium for such services and facilities (Task Force on Outdoor Recreation Resources and Opportunities 1988). Similar trends are reported by Siehl and his associates (1986). According to Siehl, recreation use of National Forest lands has declined since 1982 except in the Rocky Mountain Region and in California; continued growth in these regions may mirror trends in population growth. Recreation use of National Parks has grown steadily since 1969 but may be leveling off, but visitor days of use per acre of National Park land has declined sharply since 1976 apparently because of many additions of Park Service lands to the Wilderness System; the length of visits to National Park Service areas is becoming shorter. In a related area, considering today versus 1960, many more trips to public recreation areas are less than six hours in duration, whereas in 1960, many more were five or more days in duration. In terms of general demographic trends, the West and South are the regions experiencing the greatest rates of population increase. One of the fastest growing age segments of the population are those over 65 who will number over 35 million by the year 2000 (Siehl 1986).

These facts and figures on personal needs for leisure time and on public recreation demand have implications for the Clear Creek project, especially for the design of products offered. The recreation opportunities provided should relate to personal goals, especially self esteem and self actualization. This suggests that the mix of products offered should include some opportunities for physical and mental challenges; also, the project could offer some short term alternative experiences to those Upper Arkansas visitors primarily interested in physical challenges. Nationally, the modern outdoor recreationist seems to be interested in experiences of relatively short duration; the mix of Clear Creek products should provide for experiences that can be consummated within a relatively short time frame. However, given travel times from the Front Range, the project should target the weekend and week-long visitor, and offer opportunities that appeal to these visitors. Also, products should be offered for expanding portions of the population. America is becoming increasingly urbanized, and increasingly older, and the inclusion of marketing initiatives and specialized products targeted at inner city dwellers and senior Americans should be a priority during the design stages of the project.

CUSTOMER SUPPLY. If the Clear Creek National Historic District becomes a reality, where will consumers come from, and will there be enough of them to make the project a success? Or, to put it another way, what existing market segments currently exist that can be targeted and how can these segments be expanded? As discussed in the introductory section, the San Isabel is classified as an urban forest, and a large proportion of its users are from the larger Front Range urban corridor including Denver and Colorado Springs (refer to figure 1). In terms of nation-wide comparative recreation use, the Pike and San Isabel has consistently ranked in the top 20 National Forests with an annual recreation visitors day (RVD) total averaging between 4 and 5 million RVD between 1979 and 1988 (the figures reported here and other pertinent visitor use data are maintained by the Supervisor's Office, Pike and San Isabel National Forests, Pueblo, Colorado). In 1986 the Pike and San Isabel ranked 13th with 4.22 million RVD and in 1987, it ranked 17th. The trends in the figures indicate a recent upswing in recreation use; total recreation use of the Forests has increased from roughly 3.8 million RVD in 1983 to nearly 4.6 million in 1988, an increase of over 20 per cent in six years. Recreation use of National Forest lands in the Upper Arkansas (the Leadville and Salida Ranger Districts) shows similar

trends; combined, the districts produced 1.355 million RVD in 1988 or appropriately one-third of total recreational use of the Forests. A notable related statistic is increased use of wilderness (up from 107,000 RVD in 1987 to a projected 155,000 RVD in 1989. The conclusion from these figures is that there is a secure and increasing base of potential customers, and ready targets for a marketing campaign. A preliminary survey of the current situation suggests several visitor segments that might be targeted (these are displayed in figure 1 as well):

1. Local Area. While the local population base in the Upper Arkansas area is not large by urban standards, there are more than 10,000 total residents. In general, the local populace is aware and is very proud of their historic heritage; many locals can trace their roots to the pioneers of the mining boom. The local population therefore would be very interested in the Clear Creek initiative, and might assume a proprietary stance regarding the project. Locals might be expected to visit Clear Creek to "see how things are going this year", as well as for particular recreation experiences. Their contribution should not be underestimated, and the product mix should include opportunities designed for them.

2. The Colorado Front Range urban corridor (refer to figure 1; Front Range urban areas are labeled "1"). There are nearly three million urban residents in the Colorado Front Range which stretches approximately 150 miles from north to south from Ft. Collins to Pueblo (figure 1). The Upper Arkansas and Clear Creek are conveniently accessible to the Colorado urban population along several well-maintained highway corridors ("2" in figure 1). Leadville is a quick two hour drive from Denver via Interstate 70, or a family might spend a more leisurely two and a half or three hours using U.S. 285, U.S. 24, or U.S. 50. Thus, a round-trip to Clear Creek from the Colorado Front Range is possible within a one-day or ten hour itinerary, or as the target of a week-end jaunt with an overnight stay. Thus, Clear Creek has many potential market segments in the Front Range urban area. The marketing plan should contain methods of promoting Clear Creek within this area. One idea would be to promote off-season (spring, fall and winter) use of the area, as it is convenient for a week-end jaunt, and the urban users would not be competing with the wider tourist market during the peak summer season.

3. Potential out-of-state customers. Colorado is the destination of many out-of-state recreation visitors, especially during the summer tourist season. The state receives many visitors from the sun-belt including working families from the near Southwest (Texas and Oklahoma) and retirees from Arizona. These visitors should be targeted in the marketing plan; logical points of contact are the Colorado Tourism Board's Welcome Centers at Trinidad, Burlington, and Lamar, the international airports at Denver and Colorado Springs, Bent's Old Fort on U.S. 50 from Kansas ("3" in figure 1), and the Georgetown - Silver Plume Historic District on Interstate 70 ("4" in figure 1).

4. International customers. With increases in individual wealth in Japan and western Europe, the numbers of international tourists visiting the United States have increased in recent years. A large proportion of foreign visitors are familiar with and excited about the history of the American West and the cowboy and prospector. Many of them visit Colorado now, and means of capturing this market segment should be included in the marketing plan.

Current visitation within the Upper Arkansas is linked to season; market segments include winter and fall visitors as well as the peak season summer visitor. In-state and out-of-state visitors regularly flock to the Upper Arkansas in pursuit of recreational experiences, as noted in the current management section. During the summer season, the Forest Service campground complexes within the Upper Arkansas area at Turquoise Lakes, Twin Lakes, Chalk Creek, and Cottonwood Lake are filled to capacity. These visitors use the area for general recreation pursuits; they are here to enjoy the mountain air and scenery and to escape from the summer heat and urban crowds of their lower elevation home cities and towns. While their primary recreation goals may not be slanted toward the historic resources of the area, the opportunity to experience the pioneer spirit and lifestyles of the 19th century miners might be included in their vacation itineraries, if they were made aware of the opportunity. There also is significant off-season recreational use of the area including fall

aspen-leaf viewing and winter snowmobile touring and cross-country skiing. Fall and winter recreationists are another potential segment that should be addressed in the marketing plan.

This preliminary assessment suggests there is an ample supply of potential customers for Clear Creek; contact must be made with the market segments within the wide potential visitor base. Thus, a critical preliminary step in planning is the implementation of a marketing study to identify potential users and a marketing survey to identify the desires and dislikes of potential user groups. After the initial marketing study a plan to increase the breadth of the existing market is desirable, and a means of communicating information from the managers of Clear Creek to the potential customer is critical.

PRODUCTS. A third critical area in terms of success is product; it is fairly well established and assumed (for example, see the recent editorial in the Denver Post <1990> regarding the importance of 19th century mining remains as tourist attractions) that there is a demand for recreation experiences focused on Colorado's frontier mining heritage. Visiting historic sites is one of the most highly valued recreation opportunities offered by the National Forests according to research conducted for the 1989 Resources Planning Act Assessment (Cordell n.d.). According to the figures provided by project leader Ken Cordell, visiting historic sites was valued at $43.20 per person per trip, second only to developed camping. However, the current supply of public cultural resource visitation opportunities may be sufficient to meet public demand. There are existing public attractions based on the mining boom theme that provide this type of experience. And, some of these (for example, Georgetown - Silver Plume, Central City and Cripple Creek) are more convenient to the Front Range urban markets than is Clear Creek. Why would a history buff with a hankering for fresh mountain air drive three hours to Clear Creek when alternatively he or she can spend an hour or two driving to Central City or Cripple Creek and be back home for a late supper? The answer is that Clear Creek must offer products and experiences that are not available or are of better quality than those of these potential competitors. Clear Creek would seem to have the potential to meet this challenge through its pristine wilderness setting and rustic historic remains. These particular attributes are absent at alternative locations, which are basically limited to urban settings. This potential can be fulfilled by designing a mix of products that is responsive to customer demand and is consistent with the resources and setting available. The product mix should accommodate customer desires and opportunities to experience cultural resources, wildlife, alpine environments and natural attractions within a variety of interfaces (including visitor center exhibits, on-site interpretive displays, and self-guiding trails where the visitor can "discover" resources. Such trails can be designed to maximize visitors' interactions with cultural and wildlife resources, and minimize impacts on sensitive habitats (Sachett 1990). Detailed development of product mix should be incorporated into the Marketing Plan and comprehensive Management and Use Plan.

Information regarding which products are desired by customers can be gathered before the actual formal planning stage of the project through design and circulation of a questionnaire regarding Clear Creek, if such a survey can be implemented in a legal fashion. The Forest Service and other agencies providing outdoor recreation products are experienced in this area and several guides to their design and use are available (Alldrege 1973, Shafer and Hamilton 1967). A pre-project survey is an integral step in designing the products available to the public customer and such a survey will be included in the Clear Creek Marketing Plan.

One tool that can be used during the design stage is a product matrix. Customer segments (seniors, mountaineers, the disadvantaged, inner city children, bicyclists, etc.) can be arrayed on one axis and resources/recreation opportunities on the other axis. This will produce a matrix of cells that can filled or not filled to generate a suitable product mix. It would not be necessary to fill every cell with one or more experiences or products, but by using the matrix approach the manager can deliberately select a certain recreation opportunity strategy and insure that the demands of his market segments are being addressed.

Another product-related concern is quality control. Maximum carrying capacity and crowding are concerns that must be addressed during the planning phase. A 1988 survey (Denver Post 1990a) found that Americans ranked crowding second to natural beauty among factors that affect their choice of an outdoor recreation destination. It has been established that outdoor recreation experiences at some of our most treasured

outdoor sites have been diminished through use beyond their capacity to absorb human visitors. Overcrowding beyond capacity has two deleterious effects based on pertinent studies (Tourism and Recreation Research Unit 1988). First, the recreational resources and their settings will be degraded with increased vandalism, litter, noise, and destruction of undergrowth; and second, the congestion of human visitors will degrade the recreational experiences of individual visitors (coping with increasing human-caused conflicts and distractions will occupy the visitor rather than recreation experiences). One of the primary aspects of the Clear Creek recreation experience is the pristine and inspirational natural setting, and the capacity of this area to absorb human visitors is limited. Provisions for monitoring product quality, relieving possible crowding and overuse, and lessening the physical, visual and auditory impacts of visitors must be included in the comprehensive Management and Use Plan.

What about competition (competing products)? It can be surmised from this discussion that Clear Creek contains a variety of experiences for the outdoor recreation visitor, and that there are potential market segments in local, state, and out-of-state population areas. Other local (Upper Arkansas) history-related recreation opportunities appear to complement Clear Creek rather than offering competition. Leadville opportunities are confined to the urban environment and present both the advantages and disadvantages of urban recreation experiences. Attractions such as the Mining Hall of Fame, Healy House and Dexter Cabin, and the Tabor Home and Opera House are basically indoor structured experiences. The Alpenglow Tours offer an opportunity to view some of the famous mines, but the customers' experiences are limited to a quick glimpse of the mines from a vehicle. The Clear Creek product would be less structured and allow for a leisurely examination and contemplation of the mining boom in a more natural setting.

True competition might be offered by other in-state areas that promote history-related recreation opportunities focused on the mining boom. Three particular areas area notable, these are Central City, less than an hour's drive west of Denver, Cripple Creek west of Colorado Springs, and the Silver Plume - Georgetown Historic District on Interstate 70 one hour west of Denver and only 50 miles distant from the Upper Arkansas. These potential competitors appear to offer experiences that are somewhat different when compared to Clear Creek. Central City and Cripple Creek are within a comparatively short drive from the Colorado Front Range cities and are ideal for a one day visit. They do not offer more than minimal capacities for overnight accommodations including both motel and hotels and private and public campgrounds. The recreation experiences are mostly urban in setting and confined to these former boom towns and their vicinities. Silver Plume - Georgetown offers a greater variety of experiences in more varied settings, but overnight accommodations are again limited. This attraction draws the transient visitor who is traveling Interstate 70 between Denver and points west and the day-only Colorado visitor. Again, the settings provided are mostly urban and the experiences structured by the group tour format. Rather than being seen as a possible competitor, the Georgetown - Silver Plume Historic District might be better viewed as an opportunity for contacting potential market segments. The visitor with an interest in western history traveling I-70 can be made aware of Clear Creek and the opportunities in the Upper Arkansas through display of promotional materials at this location.

MARKETING. One can conclude from this discussion that marketing issues are vital to the Clear Creek project. There is little rationale for proceeding if there are few customers that desire this type of experience and are willing to pursue the opportunity. The Forest Service has been hampered in its prior efforts to meet public recreation demands because it has been an internally focused organization (Syme et al 1989). To compete effectively in today's outdoor recreation arena, the Forest Service must become externally focused. We must be more concerned with satisfying the changing needs of our customers, and we should better incorporate the principles and strategies of marketing into our management practices and planning procedures. Also, we must develop strategic plans that detail our mission (in terms of providing outdoor recreation opportunities for the recreation visitor), that describe long term objectives in terms of the mission, and that develop strategies for obtaining the objectives. These plans should be supported by marketing plans which include discussions of marketing objectives, identify target markets, establish competitive positions for each target market, and develop appropriate product mixes for each target market.

Can the recreation management organization of the Pike and San Isabel National Forests be accommodated into this idealized framework? As described in the settings section, the San Isabel National Forest has a master plan for future recreation management (Vander Kolk 1990); the Clear Creek project is consistent with the direction specified in this document. However, a marketing plan to support the Recreation Strategies is not available. To remedy this lack, the outline of a marketing plan for the Clear Creek Project and is attached to this paper (Appendix A). The marketing plan includes sections addressing (1) pre-project marketing surveys, (2) identification of target markets, key publics and internal market segments, (3) products, prices and competitive position, and (4) promotion. The marketing plan outline as presented is not intended to be a complete and thorough presentation but merely identifies the critical elements of the plan; a detailed plan should be developed once the planning phase of the project is underway. The Clear Creek plan is based on the concepts developed by Syme and his co-authors (Syme et al 1989).

PARTNERSHIPS. The development and implementation of an effective partnership network is another key component of the proposed Clear Creek National Historic District. Committed partners can contribute to a project of this sort in several areas:

1. By spreading the financial responsibilities and human resource commitments among contributing partners, the total impacts on any one agency or party will be reduced.

2. Development of a partnership network with a diverse array of participants will increase the support base for the project. With this in mind, it is important to recruit or invite a range of partners from within the public and private sectors, and from a wide geographical area (local, state, and national partners).

3. Development of a partnership network will allow the incorporation of a variety of recreation experience and expertise into the formal design and operation of the project. This will enhance the quality and increase the attractiveness of recreation opportunities.

4. Development of a partnership network will increase the effectiveness of the project marketing plan, as the partners as a group will have access to markets and promotional conduits not available to a single agency or party.

Partnership is an increasingly important concept in Forest Service recreation management; with increasingly restricted funding and limited human resources, partnerships are a viable alternative approach to providing high quality recreation products to the public customer. Numerous means are available to the recreation manager in pursuing and consummating partnerships (Cron n.d.). These include volunteer agreements, contributions, collection agreements, participating and cooperative agreements, challenge cost share proposals, memoranda of understanding, contracts, and special use permits. The manager can evaluate the basis of the partnership and select the appropriate type of agreement or formal arrangement. As noted in the introductory discussion, the manager should pursue several complementary partnership agreements to increase the quality of the recreation product, relieve development and operational costs, and provide access to different market segments of the public. Some of the areas where partners should be sought are the following:

1. Internal partners. The Clear Creek project has a focus on local mining history, scenery, natural resources, and non-structured experiences. The project is compatible with current national initiatives in certain resource management areas, and internal partners should be recruited in those areas. Specifically, the project should incorporate partners in timber, wildlife, and fisheries management. The Forest Health initiative (McIntire ed. 1988) should be highlighted. Clear Creek contains a diverse array of vegetation stands, and the master Interpretive Plan should include presentations and displays illustrating Forest Service management of the public's forests. Clear Creek can be a vehicle for furthering current national initiatives in management of fish and wildlife resources including the "Get Wild" wildlife initiative (USDA Forest Service Rocky Mountain Region 1989) and the "Rise to the Future" fisheries initiative (USDA Forest Service, Wildlife and Fisheries Management Division 1989). The areas contains healthy wildlife populations including Rocky

Mountain sheep, elk, deer and ptarmigan; in addition, the western portion of the canyon is a resting area for migrating bald eagles. Clear Creek itself is a healthy fishery for rainbow and brook trout. Non-consumptive wildlife opportunities including bird and large mammal watching (the "Eyes on Wildlife" part of the Get Wild program), should be an integral part of the project. Bighorn sheep can be seen at any time of the year, and elk and bald eagle viewing opportunities are seasonally available. Sachet (1990) has shown that through integrated planning, loop trail systems can be designed to maximize visitors' interactions with local wildlife and fisheries, and to build their appreciation for sensitive habitats.

2. Partnerships with other public agencies, federal, state and local levels. There appear to be outstanding possibilities for partnerships with other public agencies with the goal of providing better recreation products at Clear Creek. The Bureau of Land Management and the Colorado Division of Parks and Outdoor Recreation recently have consummated an agreement creating the Arkansas Headwaters Recreation Area (refer to Current Management section). As the park is adjacent to Clear Creek, both projects could share marketing initiatives and customers to some degree, and there may be opportunities to create recreation products that include aspects of both attractions. The Rocky Mountain Region currently has an effective partnership with the Colorado Division of Wildlife. This existing partnership can be extended in developing non-consumptive wildlife recreation opportunities at Clear Creek. Another possible partner at the state is the Colorado Historical Society; the Society may be able to contribute funds and expertise in nominating the area to the National Register of Historic Places, in preserving the key historic buildings and mines, and in promoting the district. The designers of the project should pursue an agreement with the state to provide a promotional display featuring Clear Creek at the Georgetown - Silver Plume Historic District. Also, the Society may be interested in becoming an active operating partner for Clear Creek, as they operate similar projects throughout the state. With this in mind, the Historical Society should be contacted regarding their role during the initial planning stages of the project. The Colorado Tourism Board hosts Colorado Welcome Centers at Trinidad, Burlington, and Lamar for out-of-state auto tourists, and distributes promotional materials. The Board should be contacted regarding producing and distributing visitor's information describing the recreational opportunities at Clear Creek.

3. Partnerships with the private sector. There are several active possibilities for exploring mutually beneficial working arrangements with the private sector:

(a) The Clear Creek Ranch, near the eastern end of the canyon currently provides a small guest ranch for summer visitors. In a concessionaire partnership with the District the guest ranch could provide several recreation products including horseback and wagon tours, and guided tours of the District in general.

(b) The Clear Creek Canyon Historical Society restored many of the historic buildings within the canyon and operates a small museum at Vicksburg. Hopefully, the Society can be revitalized for participation in this project and can provide or recommend concessionaires for some of the point attractions within the canyon.

(c) Private firms (for example, Alpenglow Tours) within the town of Leadville fifteen miles away might be interested in promoting or participating in this project, as Leadville actively promotes mining history and heritage as a visitor attraction.

(d) The Leadville and Buena Vista Chambers of Commerce are anxious to expand business opportunities and selling volume in the Upper Arkansas. This suggests they would be more than willing to assist and participate in a venture of this type, which has the potential to draw more visitors to the area.

(e) Non-profit private supporting organizations. Other Forest Service offices have designed and currently operate recreation attractions on the same scale as Clear Creek. For example, the Northwest Region operates three major visitor centers at Cape Perpetua, Lava Lands and Mount St. Helens. Mace (1990) describes how non-profit organizations have assisted in the funding and operation of these centers. The Pacific Northwest National Parks and Forests Association is classed as an "interpretive association" which staffs the visitor centers; the proceeds from sales at the center supplement federal funds for operations and maintenance.

Mace also describes "friends organizations", which may serve broader purposes than interpretive associations, including raising funds for capital improvements and participating in project design. The feasibility of establishing an interpretive association and a friends group should be explored by the project designers as means of lowering costs, increasing operations efficiency, and broadening the support for the project.

V. THE MANAGEMENT AND USE PLAN

One of the first substantial products to be developed after garnering of support and preliminary scoping is a draft comprehensive Management and Use (M&U) Plan. This plan will be the basis further developing the final form of the initiative. It is a concrete product that can be reviewed by interested private interests and agency staff. In addition to functioning as a basis for conceptual development, the M&U Plan will provide the overall management framework necessary for ultimate project operation. The plan should address the following integral aspects of the initiative:

1. Specific objectives to be addressed and practices to be implemented in managing the historic district, including the identification of all significant historic, natural, and scenic resources integral to project development.

2. A summary of any needed or anticipated cooperative agreements to be consummated with state and local government agencies, and with private groups.

3. The basic measures to be included in a general protection plan conceived to insure preservation of the most vulnerable and sensitive resources.

4. A discussion of marketing and tourism opportunities (this should be only a summary discussion; the marketing strategy for the initiative would be developed in detail in a separate Marketing Plan).

5. A discussion of appropriate levels and types of visitor use including control of visitor density and a traffic management plan. This discussion also would include provisions for accommodating special populations, especially the physically disadvantaged, children , and the non-English speaking visitor. Another integral part of this section would be the essentials of a safety program including provisions for medical emergencies.

6. A summary discussion of interpretive strategies, including recommended sites, activities, programs, and publications (this should be a summary only; a detailed presentation of interpretation would be developed in a separate Interpretive Plan).

7. A series of draft site plans for proposed visitor's attractions. These would consist of operating plans and sketch maps for interpretive and recreation sites, and for facility locations, including entrance stations, campgrounds, staging areas, visitor's center, etc.

Development of a management and use plan for Clear Creek is beyond the scope of this document. However, the reader is provided with a preliminary list of sites and descriptions to be included in the Clear Creek M&U Plan in Appendix B. The forms used in the appendix and their formats were developed by Veverka and Associates for the Corps of Engineers Interpretation Manual, and are used here by permission.

VI. INTERPRETATION

The recreation products offered the Clear Creek customer will include a prominent interpretation component focused on local mining history and natural resources; the ultimate success or failure on the Clear Creek initiative is dependent to a large degree on a strong interpretive program. Interpretation can be employed to meet a diverse set of management objectives, especially increasing the value of recreation experiences and customer satisfaction. It can be particularly effective in arousing the intellectual curiosity of the visitor and in providing an inspirational experience. Also, the visitor can relate the interpretation of what is being observed to his own life, and thus interpretation can aid in the development of a more enlightened and knowledgeable citizenry (Veverka and Associates 1988).

In designing interpretive programs and displays, Tilden's six principles of interpretation (Tilden 1975) are as applicable today as when he first developed them fifteen years ago; these always should be foremost in mind when developing the interpretive component of a recreation development:

1. All interpretive efforts must relate to a visitor's personality, experience, or interests.

2. Information does not equal interpretation, but all interpretation contains information.

3. Interpretation is a separate art which combines many forms of other communications art, regardless of subject material. Any art is to some degree teachable.

4. Interpretation does not equal instruction, but rather provocation.

5. Interpretation should aim to present a whole rather than a part.

6. Interpretation for children must be designed specifically for children, and not simply be a dilution of programs for adults.

A master Interpretive Plan is an integral part of the Clear Creek project, but initiation of this phase of work should follow the first phase of scoping, seeking partnerships, and developing a marketing plan. Also, it would logically follow the development of a draft comprehensive management and use plan as described in the preceding section. The outline of an Interpretive Plan for Clear Creek is Appendix C of this paper and draws from the Basic Interpretive Services Training Course Outline used by Veverka and Associates (1988) and the Army Corps of Engineers Interpretive Services Manual (1988).

VII. CULTURAL RESOURCES MANAGEMENT

Careful planning for the interpretation and protection of the historic resources that constitute the core of the Clear Creek project is a key project component. The canyon contains most of the historic resources that are important in terms of the project, including the Vicksburg and Winfield townsites (listed on the National Register of Historic Places in 1977 and 1980), and the Clear Creek Flume. The mines, which are the other key part of the historic resources, are located on the surrounding slopes. The most important mines are the Swiss Boy, the Fortune, the Tasmania, and the Banker (refer to figure 2 for locations). In addition, there are other mining-related historic resources on the periphery of the area that merit consideration for inclusion within the wider scope of the project. Currently, there are some minimum provisions for protection and interpretation of cultural resources within the canyon. In 1971, holders of recreational summer home permits and private landowners in Clear Creek organized the Clear Creek Canyon Historical Society of Chaffee County (Leadville Ranger District 1974). The Society was active during the 1970s and has maintained the rustic appearance of the Vicksburg townsite through mutual agreement. While their efforts were not as

successful at Winfield (several modern cabins are present, albeit only visible in the background), they did restore the Winfield Schoolhouse. The Society also maintains a small museum in a Forest Service owned building at Vicksburg. The activities of the Society are not marketed to any extent, although a xeroxed brochure and guide to the history of Clear Creek was produced in the 1970s and is available (Rowe and Rowe 1976). In the context of the Clear Creek project, the Society should be a full partner; its role could be expanded to include staffing of the Windows on the Past Visitors Center, archival research to flesh out the interpretive vistas of the project, and participation in programmed events sponsored by the center including living history pageants.

At first glance, the project appears to offer a dilemma for the conscientious cultural resource manager. On the one hand, applicable Forest Service regulations (Title 36, CFR Parts 296 and 800) stress protection of significant cultural resources. But, on the other hand, the concentration of cultural resources in the superb natural setting provided by Clear Creek is a rare recreation opportunity for the visitor to experience and appreciate our rich American heritage. Increased human presence in the canyon may adversely affect the resources through increased vandalism and wear and tear. The problem is to design the project so that the fragile cultural resources are protected and that the intangible historic values (the pristine mountain setting) are preserved, while providing a quality experience for the visitor. Several complementary actions are recommended to achieve these cultural resource management objectives.

1. Nominate the set of significant Clear Creek mining-related resources to the National Register of Historic Places as the Clear Creek National Historic District. Currently, only Vicksburg and Winfield are listed on the National Register, and this official unequal status makes the other resources in the canyon seem less important. The mines, water diversions, other 19th century settlements, stage roads, cemeteries, and other associated historic features are all integral aspects of the 19th century silver boom and should not be treated as separate and unequal resources. Preservation of the whole of the resource is important in maintaining a complete historic record. High Country precious metal mining is one of the more prominent themes (Mehls 1984) in Colorado history according to the State Historic Preservation Officer, and the Clear Creek resources as a group are a very significant contribution to this theme. Official recognition by listing the district is important in promoting the project and in recruiting partners. A National Register district will be a better drawing card for attracting visitors, especially when considering competition from other similar attractions. Potential partners, for example, the Colorado Historical Society and local Chambers of Commerce, will be more amenable to the partnership concept if the District is a reality. Thus, development and processing of the nomination should be a first priority during implementation of the project.

2. Consider Clear Creek Canyon as a cultural landscape (Melnick et al 1984) for management purposes. The local landscape should be considered a part of the National Register District, and any proposed modifications should be considered carefully in the context of historical integrity. The landscape includes the natural environment and the man-caused modifications that are associated with the mining boom (the townsites, mines, tailings piles, and access roads). Currently, the landscape is virtually unscarred except for the county operated gravel pit near the east end of the canyon. If feasible, this operation should be shifted to another location or partially rehabilitated and made less visible from the canyon access road. Another potential conflict is with summer home maintenance and modification. Forest Service managers should ensure that any proposed modification of existing permitted summer homes is in character with the historic district. Also, construction of any new buildings on Forest Service lands within the canyon should be discouraged, and any approved new structures should match the historic character.

3. Build in "direct" protection for cultural resources during the design phase of the project. Include provisions for regular inspection and maintenance of fragile structures, and install standard protective signing in sensitive areas. The vulnerability of individual resources should be considered when developing the management and use and interpretive plans; the plans should include provisions for "demarketing" the hardened vandal. Our experience with previously vandalized cultural resources suggests that the vandal "customer" is attracted by a certain set of conditions which are desirable in pursuing his "recreation experience". These include seclusion from public scrutiny, availability of a vehicular escape route, and no fear of

discovery by law enforcement. The Clear Creek project should be designed so that the conditions desired by the vandal are minimized. One component of a volunteer program or partnership agreement could be a "caretaker" function whereby regular inspections are conducted of vulnerable cultural resources.

4. Emphasize protection and preservation of heritage values at the visitor's center, at individual interpretive sites, and at other visitor contact points. Preservation messages are an "indirect" means of protecting resources and deterring vandalism; such methods rely on site design and communication to realize management goals. When practical, they are better solutions from the visitor's standpoint because they intrude less on experiences and because they tend to foster positive public relations (Vander Stoup and Gramann 1987). Recent studies have shown that resource protection messages can be an effective part of interpretation. Indirect methods may be effective in deterring the non-habitual vandal who is tempted into destructive acts by circumstance; they also may help lessen inadvertent site damage or wear and tear by visitors through increased awareness of the fragile nature of historic resources.

5. Provide for the protection and interpretation of historic mining resources located in the Collegiate Peaks Wilderness in the management and use and interpretive plans. Visitors who include wilderness experiences in their travel plans will through circumstance encounter cultural resources, especially those associated with the mining boom. These encounters can be positive rewarding experiences, especially if the visitor has some prior knowledge regarding the site. Or, from the manager's viewpoint, the encounter can be negative if it results in vandalism or inadvertent damage to the resource. Active management and interpretation of cultural sites located in wilderness are not incompatible uses and are part of responsible cultural resources management (Throop 1990, Wildesen 1990). While on-site signing is incompatible with the idealized wilderness experience, the visitor can be provided with direction, and portable interpretive guides (brochures and books) at contact points. The visitor's center and wilderness trailheads are logical locations for providing such information.

VIII. IMPACTS

The proposed Clear Creek National Historic District will affect the natural environment and resources of the canyon and the surrounding high country, the current public and private uses of the canyon, and the economy and social environment of nearby communities. These are issues and concerns that must be addressed during the planning phase of the project; analysis of potential impacts has implications for the final form and direction of the project. Creation of a Clear Creek National Register District may affect other natural resources and Forest Service management of these resources. The critical questions to be answered here are as follows:

1. What are the effects of the project on resources and current human use of the canyon?

2. If the effects of the project are predicted to be negative in terms of current resource and social values, what effective mitigation measures can be implemented?

3. How can positive effects for management of other resources can be incorporated into the project?

Public involvement, including identification and discussion of impacts, are an integral part of the planning process for federal projects, and are accommodated through a scoping process. This procedure is mandated by the National Environmental Policy Act and the corresponding federal regulation applicable to the Forest Service, Title 40 CFR 1500 (President's Council on Environmental Quality 1978). Before "going public", it is advantageous to have developed the basics of a development plan with a preliminary list of impacts and a range of alternatives; that is the intent of this discussion. The preliminary list of impacts presented here is based on an inventory of San Isabel National Forest staff members responsible for various management

areas. One area of predicted impacts, cultural resources, is not included here, as it was discussed in detail in the last section.

PRIVATE ENTERPRISE. How will the project affect private businesses in the area? Clear Creek may be a competitor that will syphon off customers from other Upper Arkansas tourist-oriented attractions operated by the private sector. Or, Clear Creek could attract more visitor to the Upper Arkansas and thus provide more opportunities for the private entrepreneur. Can the private sector provide services and accommodations that will improve the quality of the Clear Creek experience offered to the customer?

PRIVATE USERS OF CLEAR CREEK. Currently, there are a licensed dude ranch and thirteen special use permit summer homes within the area proposed for the initiative. Other special use permits are for the Western Slope Gas Company pipeline, Public Service Company of Colorado transmission line, and Sangre de Cristo powerline. The summer home permits are for use of historic cabins within the former boom towns of Vicksburg, Rockdale, and Winfield. The utility easements are located in the eastern part of the canyon near the proposed boundary of the Historic District. Will the Clear Creek project affect these existing private rights, and if so, how can the private interests in the canyon be protected during the implementation of the project? The private interests in the canyon should be contacted regarding their concerns early in the scoping process. Also, how they might become contributors to the project through partnerships agreements or other means should be a planning consideration.

RECREATION RESOURCES. Clear Creek currently is used by a diverse spectrum of recreationists including wilderness hikers, fishermen, hunters, mountain bikers, snowmobilers, cross-country skiers, and those merely interested in mountain fresh air and scenery. How can the current recreation experiences be preserved given the goals of the project? Current recreation opportunities spectrum classifications and visitor uses must be considered during the planning and design phase for the Clear Creek initiative.

VISUAL RESOURCES. Can visual quality objectives for the area be maintained given the actions proposed for the Clear Creek project? The project may have the potential to adversely affect the spectacular scenery and natural ambiance that is a key portion of the envisioned customer product. If so, how can potential adverse affects in visuals and other similar aspects of the natural environment be avoided or mitigated?

SPECIAL POPULATIONS ACCESS AND OPPORTUNITIES. The needs of the physically and mentally disadvantaged should be accommodated during the design of the Clear Creek project. What can be done to create quality recreation opportunities for the physically challenged and other disadvantaged segments of the visitor spectrum. The facilities for the project should incorporate barrier free access for physically-disadvantaged visitors. The needs of other special populations, for example, visually-impaired individuals, the elderly, non-English speaking groups, and children should be considered during the planning process. These considerations should focus on access and the means to fully participate in and enjoy the offered recreation opportunities.

MINERAL RESOURCES. Creation of a National Register District may affect hard rock mineral exploration and development in the canyon. Although most precious metal mines were played out by 1910, there may be undiscovered precious mineral deposits in the area, and the potential for economic extraction of commodity minerals such as zinc and molybdenum. How will development of the Clear Creek project affect existing mineral rights and potential mineral development? Marti Martinez, geologist for the San Isabel Forest, has researched the minerals resources question for the Clear Creek area and has prepared a minerals status report (available at the Forest Headquarters in Pueblo). Her research indicates there are 62 active claims in or near the project area. While many of the claims are on the slopes above the valley, some are in the vicinity of Rockdale and Winfield, and hence a management conflict is possible. Martinez in her report recommends formal withdrawal of the area for mineral entry if the Forest Service determines to pursue the Clear Creek project.

TIMBER RESOURCES. The timber resources in Clear Creek vary from lodgepole pine and aspen at the lower elevations to spruce-fir forest on the high ridges overlooking the valley. About eleven per cent of the Clear Creek watershed exhibits saw timber and fourteen per cent is pole-sized timber and saplings (Leadville Ranger District 1974). Fifty-five per cent of the watershed is not forested and consists of high altitude tundra or alpine sage-covered steppe. Much of the forested area is poorly stocked with marketable timber. Also, steep slopes and shallow soils characterize the drainage, factors that increase the inherent costs of any proposed timbering operation. Other than some historic logging for mining timbers and cutting for local use, there has been no harvesting of forest products in Clear Creek, nor does the Forest Service plan any silvicultural treatments here in the foreseeable future.

WILDLIFE AND FISHERIES RESOURCES. The Clear Creek area supports healthy populations of several wildlife species, and Clear Creek is a productive trout stream. How can adverse affects on wildlife values be avoided, and how can the project contribute to Forest Service fisheries and wildlife management goals? Wildlife management within the San Isabel National Forest is based on the "Diversity Unit" concept. Diversity units comprise a wildlife habitat mosaic with the units defined by natural topographic boundaries encompassing 5000 to 20000 acres. Within each diversity unit, vegetation stands and other critical resources are managed to (a) provide the habitat needs for the identified management indicator species, (b) to provide habitat for threatened or endangered species, and (c) to maintain habitat for viable populations of all existing vertebrate wildlife species (Bailey 1990). The Clear Creek project area contains all or portions of two diversity units, numbers 103 and 104. The critical wildlife habitat concerns in the two units are as follows:

1. For elk, there are calving areas that should remain undisturbed during calving season.

2. For deer, the lower portion of the canyon and the east and south facing slopes flanking the Arkansas River are critical winter range.

3. Both units contain bighorn sheep habitat areas along Clear Creek and on the north slopes of the canyon.

4. Both units contain some critical habitat for ptarmigan.

5. Unit 104 contains some seasonal resting areas for bald eagles during their migration flights.

Impacts on local wildlife and their habitats should be addressed during the design and implementation phases of the project, and potential adverse affects avoided or mitigated. The presence of substantial wildlife values in Clear Creek is an opportunity to increase the range and quality of recreational experiences offered the visitor. Opportunities for wildlife viewing and appreciation should be considered during the development of the management and use and interpretive plans. One promising approach is thorough integrated resource interpretive trail planning as suggested by Sachet (1990) and discussed in a previous section of this paper.

FORAGE AND RANGE RESOURCES. Does the establishment of a Clear Creek National Historic District and related interpretive developments create a potential conflict with existing forage and grazing use? Presently, all grazing allotments are closed (Leadville Ranger District 1974); thus, there are no potential conflicts with a proposed National Historic District.

WATERSHED RESOURCES. Clear Creek is a major tributary of the Arkansas River and is a contributor to the Bureau of Reclamation Fryingpan - Arkansas water storage project; the Fryingpan-Arkansas storage system is a vital resource for the Front Range cities of Colorado Springs and Pueblo. Does the Clear Creek National Register District have the potential to affect the water quality of Clear Creek and, if so, how can adverse affects be avoided?

IX. ALTERNATIVES

The Forest Service must solicit public opinion as one of the necessary steps in designing projects affecting public lands and the users of those lands. Procedures for garnering public opinion are specified in the National Environmental Policy Act and the derivative federal regulations (President's Council on Environmental Quality 1978). One of the first steps in implementing the NEPA process is "scoping"; that is, the agency proposing the action should actively solicit public opinion to identify issues and concerns. These are to be included in a subsequent Environmental Impact Statement that also includes action alternatives, environmental consequences of the separate alternatives, and a recommended alternative. The culmination of the NEPA procedure is a record of decision (ROD) by the appropriate authority formalizing the decision regarding the alternative to be implemented.

The proposed Clear Creek National Historic District clearly falls under the NEPA procedures and will require a scoping process and preparation of an EIS describing possible alternative actions and their environmental affects. Preparation of detailed alternatives for Clear Creek and environmental analysis is beyond the scope of this paper and premature at this point. However, the range of possible actions can be approximated by suggesting some tentative and preliminary alternatives. Alternatives can be be developed by adopting one or more conceptual frameworks, one of which is amount of capital investment and facility development in the project area. If this framework is adopted, the alternatives might be as follows:

1. A VIRTUAL "NO ACTION" ALTERNATIVE. This alternative would be framed within the basic context of no new construction and few additional services. Improved or replacement signing and some maintenance of history properties to preserve their character would be undertaken. Historic preservation covenants would be enforced for the existing structures at Beaver City, Vicksburg, Rockdale, and Winfield and no out of character activities or construction would be permitted. The Clear Creek Historic Society would be encouraged to maintain its small museum at Vicksburg, provide an interpretive site at Beaver City, and act as a custodian for the canyon's historic resources.

2. A MINIMUM INVESTMENT OPTION. This alternative would include development of an unobtrusive interpretative program including facilities and services. Interpretation would be mostly limited to signing and self-guiding tours and trails, but guided tours might be provided by the Clear Creek Ranch and/or the Clear Creek Historic Society through a concessionaire agreement. Improved information contact with the public would be provided via installation of signboards at prominent contact points and through brochure dissemination. Improved parking and picnic facilities would be provided at wilderness trailheads and at historic sites. The restored structures at Beaver City could be used as a contact and information point, and could be staffed by the Historic Society through a volunteer or host agreement. The canyon in essence would be a day-use non-fee area providing low-investment improvements and minimal services. There would be a larger investment in facility improvements and interpretive developments in comparison with Alternative 1.

3. A MEDIUM INVESTMENT OPTION. In addition to the improvements described for Alternative 2, this option would include an entrance portal and "Gateway to the Past" visitor's center. Formation of a volunteer organization or other financially independent support group would be important for this alternative. The canyon would function as a day-use area, but fees would be collected at the entrance portal. Private vehicles would be discouraged or prohibited to preserve the historic setting. Transportation within the district would be by foot and bicycle trail, or by tour bus (a regularly scheduled vehicle would transport visitors between interpretive sites and facilities). A parking lot and staging area would be constructed near the east end of the canyon. Interpretive sites and exhibits would be expanded to include the spectrum of local geology, natural environments, wildlife, and history. Specialized facilities and interpretation would be designed to accommodate visitor segments including the disadvantaged and children. The Gateway would include displays, an auditorium, and comfort station. Special events such as living history displays would be developed and regularly scheduled during the summer months. Off-season opportunities and events also would be available.

4. A HIGH INVESTMENT OPTION. This option would include the facilities and services described for Alternative 3 plus facilities for overnight and longer term visitors. The canyon would operate as a developed camping location as well as an interpretive site, and a fee would be collected. Two new campgrounds would be constructed, one at the present State of Colorado camping area near Clear Creek Reservoir, and the other in the west portion of the canyon near Rockdale. Perhaps each campground could be designed to accommodate 50-75 individual sites each resulting in a potential capacity of 500 - 750 people at one time (PAOT). Each campground would be provided with a full range of supporting facilities. Private vehicles would be allowed in the district and expanded parking would be provided at the Visitors Station and the individual interpretive sites. The main Clear Creek Road would be widened and paved, as it presently is not adequate to handle increased traffic volumes.

The author's preference is for Alternative 3 or a similar strategy; this alternative seems to best address the available range of opportunities, with minimum impacts on the resources and setting, while providing a high quality visitor's experience. A relatively wide-spectrum experience can be provided, while at the same time most of the crowding and assembly-line characteristics of highly-developed recreation attractions can be avoided; alternative 3 would be most consistent with the approach to outdoor recreation management developed in this paper. Alternatives 1 and 2 would not provide additional quality visitors experiences, nor would the opportunities be markedly different from those provided at Leadville or other historic mining areas. Alternative 4 would destroy the historic character of the canyon and the natural ambiance which makes it attractive for a recreation initiative in the first place.

There are other conceptual frameworks which might be adopted to develop a different scheme of alternatives. For example, alternatives might be formulated by pursuing different complexities and configurations of partnership agreements. If alternatives conceived according to partnerships were developed, the "no action" alternative would extend the current situation whereby the Forest Service has sole management responsibility for the canyon's resources with the help of the Clear Creek Historic Society. A second scenario or alternative might be to have the historic district jointly managed by the Forest Service and the Colorado Historical Society as a prominent state visitor's attraction. A third alternative might include an agreement with the Colorado Division of Parks and Outdoor Recreation and the Bureau of Land Management to the effect that Clear Creek is an extension of the Upper Arkansas State Park. A fourth might focus on close ties with nearby communities (Leadville and Buena Vista) for joint management and tours/ promotion of the area. Obviously, there are many possibilities regarding this type of framework. Also, the partnership and development concepts could be combined in formulating alternatives; how the alternatives are framed will be a major consideration of the project design team.

A final action plan will combine the preferable portions from all alternatives after public input is received. The author does not pretend to be an expert or authority in all areas, and the preliminary thoughts here regarding alternatives are just that. During the initial phases of the project, a design team including professional managers representing affected resource areas, marketing, and partnerships will be responsible for development of suitable alternatives and the proposed configuration of the project.

X. A WORK PLAN FOR PROJECT IMPLEMENTATION

Clear Creek is conceived as a staged project with several milestone objectives; work on subsequent phases is dependent on successful completion of work objectives in the phase being developed. The phases are conceived as follows:

FIRST PHASE: (a) do initial scoping with interested publics, garner support for project with key internal staff; (b) do pre-project marketing research, begin research and initial recruitment for partnerships; (c) conduct

field and archival research necessary for national register nomination (also for development of master Interpretive Plan).

SECOND PHASE: (a) Begin NEPA process, select interdisciplinary team, formulate alternatives, do necessary analysis, prepare draft EA or EIS; (b) select design team including prospective partners, prepare draft Management and Use Plan; (c) choose a desired alternative; (d) prepare and submit National Historic District nomination.

THIRD PHASE: (a) circulate combined draft M&U Plan and NEPA document, hold public meetings and solicit public comment, (b) revise M&U Plan and NEPA document accordingly; (c) develop remainder of marketing plan, design promotional literature (c) draft and finalize partnership agreements; (d) prepare design narrative for capital investment proposal, submit proposal.

FOURTH PHASE: (a) circulate final M&U Plan and NEPA document, issue Record of Decision; (b) design and implement any necessary actions to alleviate adverse impacts of project; (c) draft master Interpretive Plan, design interpretive literature, signs, and displays; (d) organize and commission interpretive association and volunteer support groups; (e) begin process of withdrawing area from mineral entry.

FIFTH PHASE: (a) Initiate facilities/trails construction, install interpretive signs and displays, plan living history displays and events; (b) implement marketing plan; (c) finish any necessary mitigation projects; (d) dedicate National Register District.

SIXTH PHASE: (a) conduct Grand Opening, open the project to the visitor; (b) monitor quality of recreation product and maintain quality of facilities and services; (c) implement feedback measures (questionnaires when visitors leave project, oral interviews, etc.); (d) monitor condition of key natural and cultural resources; (e) implement schedule of displays and events; (f) modify M&U plan and take necessary corrective measures as response to first year of "shake-down" operations.

XI. SUMMARY AND CONCLUSION

America's public outdoor recreation program is at a critical turning point. The nation's populace is demanding more and higher quality outdoor recreation experiences to relieve the pressures of our ever more urbanized work places and homes. Faced with the need to periodically escape from the urban environment, Americans have turned first to the tradition locations of high quality outdoor recreation experiences, the national parks and monuments system. However, the available experiences at our most famous national attractions are not meeting expectations because of overcrowding; the modern visitor anticipating a wilderness experience, or at least a few days of leisure in an unfettered environment, is instead faced with a situation similar to the urban environment he/she was attempting to escape from. To put it bluntly, the federal outdoor recreation program may be failing to keep pace with increasing demand and recent demographic trends. In part, this is a failure of supply - the national system of parks, monuments, recreation areas, and other public attractions has not been expanded enough in recent years to keep pace with public demand. In part, it is a failure of marketing and management; the American public should be made more aware of the current overcrowding at our traditional outdoor recreation locations, and that there are convenient and worthwhile alternatives. Cultural resources in our National Forests may be a partial answer to this supply problem. National surveys indicate the outdoor recreationist is very interested in experiencing the colorful past that illustrates our American heritage. Rather than saving our archeological and historic sites for the academic elite, we as cultural resources managers should create more opportunities for public enjoyment and public education, with adequate safeguards, of course.

It is proposed here that the basic supply problem can be alleviated by new recreation initiatives in agencies such as the Forest Service, Bureau of Land Management, and Bureau of Reclamation, which have not been the traditional providers of developed outdoor recreation. Rather than focusing on large grandiose developments, the agencies should implement smaller scale projects planned for relatively low visitor densities. This approach will help alleviate the supply problem while at the same time it will preserve the high quality outdoor recreation experiences cherished by all Americans. The supply problem also can be helped by focusing on the broad spectrum of specific resource related recreation opportunities, including cultural resources. Clear Creek is one specific application of this new approach to cultural resources management. As a Windows on the Past Project, it will present the American public with the opportunity for memorable outdoor recreation experiences combining the picturesque ghost towns and abandoned mines of the Silver Boom with a pristine Colorado alpine setting.

Clear Creek is not conceived as a sole Forest Service recreation management initiative, but as a cooperative effort among a network of internal and external partners. By using the cooperative concept, design and operating costs can be minimized, and the quality of the recreation product offered to the public can be increased. Specific visitor desires and responsive design of products can be addressed through development of a marketing plan that identifies market segments and tailors recreation opportunities for each segment through a product matrix. An active promotional campaign highlighting the Clear Creek experience also is part of the marketing plan. Product quality will be assured through implementation of a design team with experts in all aspects of the product mix and through incorporation of state-of-the-art recreational facilities and technology. The Clear Creek project will capitalize on the modern urban customer's desire for high-quality recreation products and the willingness to pay for such facilities. Thus, Clear Creek is consistent with the "sweet-smelling toilet" initiative, and the days of the crescent-marked wooden outhouse hidden in the woods are no more. The increased costs of high-quality facilities will be offset by designation of Clear Creek as a fee collection site, and by earmarking a share of collected revenues for site maintenance. Quality of recreation product, including maintenance of desired carrying capacity, should be monitored during the operation of the District. The Clear Creek project will solve a number of cultural resources management objectives, and designation of the mining boom resources of Clear Creek as a historic district will officially give these resources the prominence they merit and allow them to be enjoyed by the American public. By highlighting and promoting its cultural resources in spectacular forest settings, the Forest Service can make a significant contribution to the nation's outdoor recreation program, and ultimately to the health and heritage of the American people.

ACKNOWLEDGEMENTS

I would like to thank the following individuals who provided insight and constructive comment on the Clear Creek project. LES RUSSELL and JAMIE LIND of the Leadville Ranger District provided their thoughts on a preliminary form of the paper, and their comments are reflected herein. JOHN VEVERKA and ALAN COPELL of Veverka and Associates provided most of the background for interpretation and the concept and format for the preliminary developed sites inventory. The Supervisors Office staff at the San Isabel National Forest was very cooperative in this endeavor, especially EMMETT FOSTER, landscape architect, BILL ZIMMER, special uses manager, TED SCHENCK, wildlife biologist, DAVE WINTERS, fisheries manager, CHRISTIE GORDON, silviculturalist, and MARTI MARTINEZ, geologist; I thank them for providing their expertise on related resources management areas. In addition, Marti also prepared a minerals character report for the Clear Creek area. I also would like to thank JACK WEISSLING, forest supervisor, and MARV VANDER KOLK, recreation staff officer, for allowing me to expend some of my very precious work time on this project; their forbearance will be repaid by my heightened perceptions of public recreation management and by the consummation of this or similar projects on the Pike and San Isabel.

REFERENCES CITED

Alldrege, Rendel B.

1973 Some capacity theory for parks and recreation areas. In Trends, (Oct/Dec 1973). National Recreation and Parks Association, Washington, D. C.

Anonymous

1903 The proposed Leadville National Forest Reserve, Colorado. Pike and San Isabel National Forests history (1680) files manuscript. Supervisor's Office, Pueblo.

Bailey, James

1990 Diversity units: what, why and how they are to be used. Department of Fishery and Wildlife Biology, Colorado State University.

Cordell, H. Kenneth

n.d. Economic significance of recreation on National Forests. Forest Science Laboratory, University of Georgia, Athens.

Cordell, H. Kenneth, John Bergstrom, Lawrence Hartmannn, and Donald B. English

1989 An analysis of the outdoor recreation and wilderness situation in the United States: 1989-2040. A technical document supporting the 1989 RPA Assessment. Southeastern Forest Experimental Station, Athens, Georgia.

Cron, Bob

1989 "Sweet Smelling Toilets". Concept presented during lecture given to Clemson 1989 Recreation Short Course to illustrate Forest Service's new commitment to high quality developed recreation facilities.

n.d. Partnerships. Loose leaf binder reference provided to the 1989 Clemson University Recreation Management Short Course.

DeBloois, Evan

1988 Portland CRM/NRS Meeting, "Windows on the Past" program. USFS Washington Office memorandum circulated to field offices.

The Denver Post

1990a Herds of tourists taming Yellowstone. Associated Press article in the August 15, 1990 edition.

1990b Mutilated Mountains. Lead editorial of March 11, 1990.

Kane, Allen E.

n.d. Recreation management notes prepared during a visit to Carlsbad Caverns National Park, White Sands National Monument, and Fort Sumner State Historic Site, spring 1990.

Leadville Chamber of Commerce

1987 Welcome to Leadville, Colorado. Pamphlet describing visitor attractions, accommodations and services in the Leadville area.

Leadville Ranger District, San Isabel National Forest

1974 Clear Creek Canyon Management Unit. Ms. on file at the Forest Headquarters, Pike and San Isabel National Forests, Pueblo.

Mace, Rodney C.
1990 Establishing a Friends Organization for the Columbia River Gorge National Scenic Area Visitor Center. Paper prepared for the Professional Development for Outdoor Recreation Management Program, Clemson University, Clemson, South Carolina.

Maslow, A. H.
1954 Motivation and Personality. Harper and Rowe, New York.

McIntire, Tim (editor)
1988 Forest Health through Silviculture and Integrated Pest Management, a Strategic Plan. USDA Forest Service Forest Pest Management Task Force. USDA Forest Service publication, Washington, D.C.

Mehls, Steven F.
1984 Colorado Mountains Historic Context. Colorado Historical Society, Denver.

Melnick, Robert Z., with Daniel Sponn and Emma J. Saxe
1984 Cultural landscapes: rural historic districts in the National Park System. Park Historic Architecture Division, Cultural Resources Management Branch, National Park Service, Washington, D.C.

Pike and San Isabel National Forests
1984 Land and Resource Management Plan. USDA Forest Service, Pueblo, Colorado.

President's Council on Environmental Quality
1978 Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. 40 CFR Parts 1500-1508.

Project LIFE, Charles C. Bullock, director
1982 Life Guide to Disabilities (draft). Curriculum in Leisure Studies and Recreation Administration, University of North Carolina, Chapel Hill.

Rowe, Jim and Louise Rowe
1976 Portal into the Past. Clear Creek Canyon Historic Society of Chaffee County. B & B Printers, Gunnison, Colorado.

Sachet, Glen A.
1990 Integrating Trail Planning Guidelines for Wildlife, Recreation, and Fish Resources on the Mt. Hood National Forest. Paper prepared for the Professional Development for Outdoor Recreation Management Program, Clemson University, Clemson, South Carolina.

Schreyer, Richard
n.d. The sociology and psychology of recreation behavior. Lecture presented to the Clemson University Recreation Management Short Course Class of 1989. Clemson University, September 1989.

Shafer, Elwood Jr., and John F. Hamilton, Jr.
1967 A comparison of four survey techniques used in outdoor recreation research. USDA Forest Service Research Paper NE-86.

Siehl, George H.
1986 Trends in outdoor recreation and related factors, 1960 to 1985. Ms. prepared for the President's Commission on Outdoor Recreation.

Supervisor's Office, Pike and San Isabel National Forests
1990 Printout on recreation visitors use statistics. From automated data files maintained at the Supervisors Office, Pueblo.

Syme, John, Gina McLellan, and Muzaffer Ueysal
1989 (Draft) Conceptual framework for forest recreation marketing in the public sector. Ms. on file, Department of Parks, Outdoor Recreation and Tourism, Clemson University, Clemson, South Carolina.

Task Force on Outdoor Recreation Resources and Opportunities
1988 Outdoor Recreation in a Nation of Communities (Executive Summary). A report of the Task Force on Outdoor Recreation Resources and Opportunities to the Domestic Policy Council.

Tilden, Freeman
1975 Interpreting our Heritage. The University of North Carolina Press, Chapel Hill.

Tourism and Recreation Research Unit
1988 Recreation site survey manual: methods and techniques for conducting visitor surveys.

Throop, E. Gail
1990 Essential for Cultural Resource Management: a Search for Compatibilities. Paper prepared for the Professional Development for Outdoor Recreation Management Program, Clemson University, Clemson, South Carolina.

U.S. Army Corps of Engineers, Huntsville Division
1988 Interpretive Services Manual.

USDA Forest Service
1919 Leadville National Forest, Colorado, visitors map. Pike and San Isabel National Forests history (1680) files manuscript. Supervisor's Office, Pueblo.
1988a America's Great Outdoors, National Recreation Strategy. Forest Service Publication PA 1403.
1988b Urban National Forest Workshop, April 10-13, 1988, Angeles National Forest. Forest Service Publication.
n.d. Windows on the Past, a Guidebook. USDA Forest Service, Washington Office, Washington, D.C.

USDA Forest Service Rocky Mountain Region
1989 Get Wild! Handout explaining the National Wildlife and Fisheries Initiative produced by the Rocky Mountain Regional Office, Lakewood, Colorado.

USDA Forest Service, Wildlife and Fisheries Management Division
1989 Rise to the Future Progress Report. Washington Office, Washington, D.C.

Vander Kolk, Marvin
1990 Recreation strategies for the Pike and San Isabel National Forests, Cimarron and Comanche National Grasslands, Ms. on file at the Supervisors Headquarters, Pueblo.

Vander Stoup, Gail A., and James H. Gramann
1987 Use of interpretation as an indirect visitor management tool: an alternative to regulation and enforcement. Proceedings of the Research Symposium, 1987 National Interpreters Workshop.

Veverka, John, and Associates
1988 Manual for Basic Interpretive Services Training. Veverka and Associates, Lansing, Michigan.

Wildesen, Leslie E.
1990 Wilderness and Cultural Resources. Circulated agency paper based on a presentation given at the First National Wilderness Management Training Seminar for Line Officers, Nine Mile Training Center, Montana.

SILVER INTO GOLD:

THE CLEAR CREEK NATIONAL HISTORIC DISTRICT

LEADVILLE RANGER DISTRICT, SAN ISABEL NATIONAL FOREST

APPENDICES

APPENDIX A:

MARKETING PLAN OUTLINE

I. PRE-PROJECT MARKETING SURVEY

A. Use existing guides to design questionnaire; design the questionnaire to identify both the potential market segments for such a project and the high-demand recreation products that could be provided. Some important questions:

- How far would they be willing to travel for this opportunity?
- How long would they want to stay?
- What conveniences and facilities would they want?
- What would they want to see or experience?

B. Identify areas and outlets for circulation of questionnaire and a party or organization to undertake the survey. Insure legal requirements are met.

C. If not legal, conduct alternative pre-project marketing research: Colorado State Tourism Board, Public Area Recreation Visitors Surveys, etc.

II. ESTIMATION OF MARKETS

A. Key target market segments.

1. Traditional area tourists. Both in-State visitors from the Colorado Front Range Urban Corridor and out-of-state tourists either travel through the Upper Arkansas area or spend portions of their vacations in the Upper Arkansas pursuing recreational opportunities. Leadville, the former capital of the Silver Boom, has been slow to adopt to changing economic conditions but recently has placed additional emphasis on capturing a larger share of the summer tourist business. Summer tourists that visit Leadville probably are interested in the history of the Colorado high country and the mining boom and hence are a vulnerable market segment.

2. Local residents in the Upper Arkansas. Local residents can be expected to assume a proprietary interest in the project, and should be encouraged to pursue periodic visits to the Districts. The products mix should include some experiences particularly tailored for their consumption.

3. Seasonal day-trippers and weekenders (including aspen lovers). Encourage this visitor segment by promotion in Front Range and other media at appropriate times of the year.

4. Campground recreationists. The Forest Service has in place a system of well-maintained campgrounds in the Upper Arkansas; and large campground and outdoor recreation complexes are maintained at Turquoise Lake, Twin Lakes, Cottonwood Lakes, and Chalk Creek (refer to figure 3). While these visitors are not in the area primarily for the experiences offered at Clear Creek, they are a market segment that can be addressed through promotion and information interfaces.

5. Foreign visitors. Visitors from other countries are often avid fans of the history of the American West; they should be made aware of the opportunity at Clear Creek through active promotion and designated public interface locations.

6. History buffs. Clear Creek should be featured in Colorado and western history periodicals. History organizations are a market segment that should be targeted in the marketing plan.

7. Other potential market segments. Other potential segments include vistors or potential visitors to the Upper Arkansas who are not primarily interested in history, but who might become interested through promotion. These include groups or individuals primarily interested in white water experiences on the Arkansas (rafters and kayakers), bicyclists, inner city residents (especially school classes), backcountry hikers, mountain climbing enthusiasts, and winter recreationists.

B. Key Publics. Key segments of the outdoor recreating public should be identified in the plan, and provisions included for reaching them through promotion and information interfaces.

C. Internal markets. Forest Service personnel are a source of potential customers as well as a resource for disseminating information about Clear Creek to friends and relatives.

III. PRODUCTS AND PRICE

A. Think of in terms of customer/resource matrix, and providing a range of opportunities for diverse segments of the public.

B. Insure following facilities/services are included.

1. Staging area (place where visitors can relax and mingle).
2. Balanced mix of recreation products (cultural resources, nature, wilderness, wildlife, fisheries, geology, etc.).
3. Living history displays and events.
4. Wilderness experiences, especially cultural resources in a wilderness setting.
5. Include some challenging experiences (physical and intellectual).
6. Include social spectrum - opportunities for solitude, self-guiding areas and places/experiences with interaction. Provide some contact with guides, Forest Service personnel.
7. Provide for special populations including the physically disadvantaged, visually impaired, elderly, non-English speakers, children.

IV. PROMOTION.

A. Literature

1. Brochures. Design and produce a brochure series on the resource related opportunities at Clear Creek; include separate brochures for historical aspects (settlements, mines, transportation, coping with the wilderness, etc.), wildlife, natural habitats, the mountain and alpine areas.
2. Produce more detailed guidebooks for the serious student of history and nature.
3. Prepare articles for literature of other organizations, for example, Colorado Magazine of Colorado Tourism Board, newspapers, Colorado History Magazine.
4. Be prepared with standard news releases for events at Clear Creek.

B. Outlets. Include Forest Service offices, other public agency offices, Leadville and Buena Vista business establishments, Denver airport, Colorado Welcomes Centers. Research potential out-of-state media outlets.

C. Other media. Prepare features for radio and television.

D. In-person promotion by staff at events around the state.

APPENDIX B:

PRELIMINARY LISTING OF SITES TO BE INCLUDED IN COMPREHENSIVE MANAGEMENT AND USE PLAN

Interpretive Site Inventory

CLEAR CREEK
NATIONAL HISTORIC DIS.

Page 1 of 2

Site Index No:

1

Site Name:

ACCESS POINT FROM US HIGHWAY 24

Site Location: ON US HIGHWAY 24, APPROXIMATELY 15 MILES SOUTH OF LEADVILLE

Site Description: LOCATION CURRENTLY HAS ONLY A HIGHWAY MARKER INDICATING MILES TO VICKSBURG AND WINFIELD. THERE IS NO INDICATION THAT THERE ARE NATIONAL REGISTER OF HISTORIC PLACES SITES IN THE CANYON, NOR ANY OTHER RECREATION OPPORTUNITIES.

Seasonal Accessibility:

Interpretive Significance: THIS IS THE POINT OF PUBLIC ACCESS TO THE CANYON AND MUST CREATE A FAVORABLE IMPRESSION FOR THE VISITOR, AS WELL AS IMPARTING CRITICAL LOCATIONAL INFORMATION.

Attach photograph/illustration

Story Development-Form B	Project: CLEAR CREEK HISTORIC DIS.	Page 2 0f 2

Site Index No:	Site Name:
1	ACCESS POINT FROM US HIGHWAY 24

Interpretive Modes

Signing. This is only access point for visitors in vehicles or riding bicycles. Advance signs should be installed 0.5 miles north and south of the access point with a large "National Historic District" sign at the junction. Also, an option would be to construct a turnout at the junction with an informat ion bulletin signboard.

Interpretive Site Inventory

CLEAR CREEK NATIONAL HISTORIC DISTRICT

Site Index No:

2a and 2b

Site Name:

CLEAR CREEK RESERVOIR FISHERMAN'S ACCESS

Site Location: On Clear Creek Road 0.7 miles west of access point off Highway 24.

Site Description: This is a desolate-appearing facility with sparse vegetation and a very prominent outhouse. The appearance of this site could be vastly improved thru plantings and better landscaping.

Seasonal Accessibility:

Interpretive Significance: The first facility encountered by the visitor; appearance and ambiance here is important.

Attach photograph/illustration

Story Development-Form B	Project: CLEAR CREEK NATIONAL HISTORIC DISTRI.	Page 2 of 2

Site Index No:	Site Name:
2a and 2b	CLEAR CREEK RESERVIOR FISHERMAN'S ACCESS

Interpretive Modes

The facilities and site areas should be spruced up so they are of similar quality in comparison with the visitors facilities provided within the historic district. Information regarding visitor opportunities shuld be available at these locations, perhaps via information bulletin board.

Interpretive Site Inventory

CLEAR CREEK NATIONAL HISTORIC DISTRICT

Site Index No:

3

Site Name:

CLEAR CREEK RESERVOIR CAMPGROUND (STATE OF COLORADO)

Site Location: South of Clear Creek Road approximately 1.2 miles west of Highway 24 access point.

Site Description: A deteriorated, not maintained campground; the facilities that are present, with the exception of a new toilet, are unusable. This locatoin is traditionally taken over by an out-of-state visitors group that flies the Texas flag during several months of the summer season.

Seasonal Accessibility:

Interpretive Significance: This is the logical location for a staging area/ visitors resting location.

Attach photograph/illustration

Story Development-Form B	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 2 of 2

Site Index No:	Site Name:
3	CLEAR CREEK RESERVOIR (STATE OF COLORADO) CAMPGROUND

Interpretive Modes

This currently is a primitive campground on state of Colorado land. Provided facilities include a restroom and several deteriorated camping spots with picnic tables and grills. Many of the picnic tables are no longer functional and there are no provisions for traffic control. The area has suffered erosion and deterioration because there is no formal site layout. No information regarding Clear Creek or other recreation resources of the Upper Arkansas area is provided.

This campground should be rehabilitated and redesigned according to a formal site plan. A plan for vehicular traffic should be developed and the existing facilities repaired or replaced. An information kiosk with material on Clear Creek and other opportunities for recreation in the Upper Arkansas should be provided. The campground should continue to be a small capacity facility with only primitive accomodations in keepoing with the low impact day-use general setting of the project. A trailhead and short link with the Colorado Trail could be provided.

If the selected alternative for the Clear Creek project includes restriction of motored vehicles in the canyon, this site would be a logical location for a staging area. Visitors would park their vehicles here before proceeding via bus, bicycle or horseback to the heart of the National Historic District. For the staging area, a large parking lot, ticket/information station, and waiting area should be provided. The site would function as a staging area rather than a campground; no overnight camping would be allowed.

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 2

Site Index No:	Site Name:
4	ENTRANCE STATION (proposed)/ COLORADO TRAIL TRAILHEAD

Site Location: On Clear Creek Road at intersection with Colorado Trail, approximately 2.2 miles west of Highway 24 access point.

Site Description:

Seasonal Accessibility:

Interpretive Significance:

Attach photograph/illustration

Story Development-Form B	Project: CLEAR CREEK NATIONAL HISTORIC DIST.	Page 2 of 2

Site Index No:	Site Name:
4	ENTRANCE STATION/COLORADO TRAIL TRAILHEAD

Interpretive Modes and site plan.

The Colorado Trail crosses the Clear Creek Road here and there is a wide area that could serve as a parking lot and visitor contact point. If the selected alternative includes collection of a fee for use of the opportunities within the canyon, this is a logical location for a fee station and entrance portal. Under any alternative, this should be a location for providing information on Clear Creek to the hiker s using the Colorado Trail. Private land is situated on the south side of the road. A secure easement for the Colorado Trail should be negotiated; also, the landowner should be contacted to determine whether he/she would be amenable to a land exchange. This property should be identified in the San Isabel National Forest land adjustment plan as a parcel to be acquired.

Interpretive Site Inventory

CLEAR CREEK NATIONAL HISTORIC DISTRICT

Page of

1 of 2

Site Index No:

5

Site Name:

CLEAR CREEK RANCH (private)

Site Location: South of Clear Creek Road approximately 3.0 west of Highway 24 access point.

Site Description:

Seasonal Accessibility:

Interpretive Significance:

Attach photograph/illustration

Story Development-Form B	Project: CLEAR CREEK NATIONAL HISTORIC DIST.	Page 2 of 2

Site Index No:	Site Name:
5	CLEAR CREEK RANCH (private)

Interpretive Modes and site plan

Clear Creek Ranch is a potential partner and concessionaire for the historic district. The dude ranch operation headquartered at this site would increase the range of recreational opportunities offered to the visitor. The ranch could provide horseback tours and other guided experiences for the visitor desiring this type of experience. The ranch also has the capacity to provide a limited number of lodging units for the visitor. The Clear Creek Ranch would be one of the products offered in the marketing package promoting the attractions of the Upper Arkansas.

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 1

Site Index No:	Site Name:
6,8, and 26	COLORADO TRAIL GATEWAY LOOP (proposed)/ WALKIN CAMPGROUND (proposed)

Site Location: Loop trail would parallel Clear Creek Road and provide hiker and mountain bike access from Colorado Trail to proposed Clear Creek Gateway to the Past Visitors Center (7 on map) and attractions further west. A walk-in campground for hikers and bicyclists could be provided at a suitable location south of Clear Creek with convenient access to the Colorado Trail (26 on map).

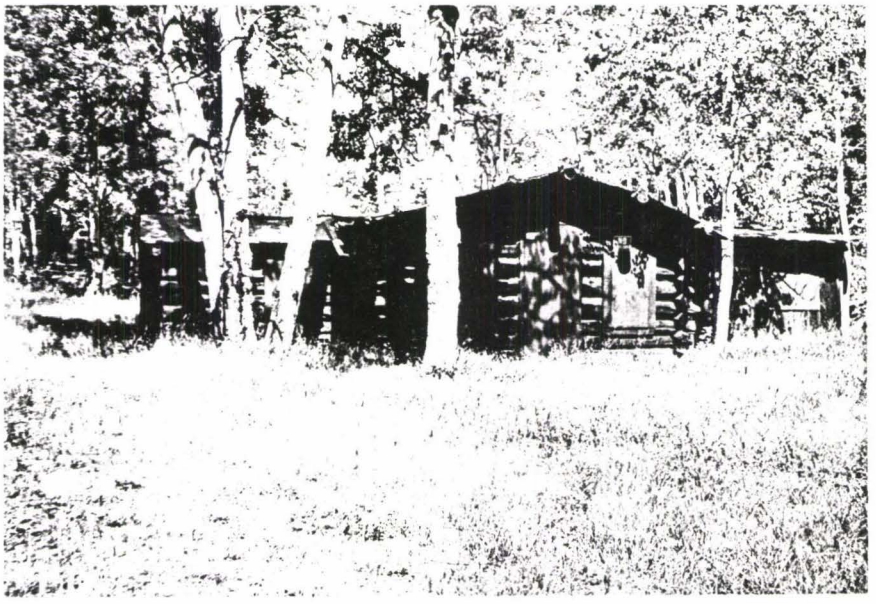
Site Description:

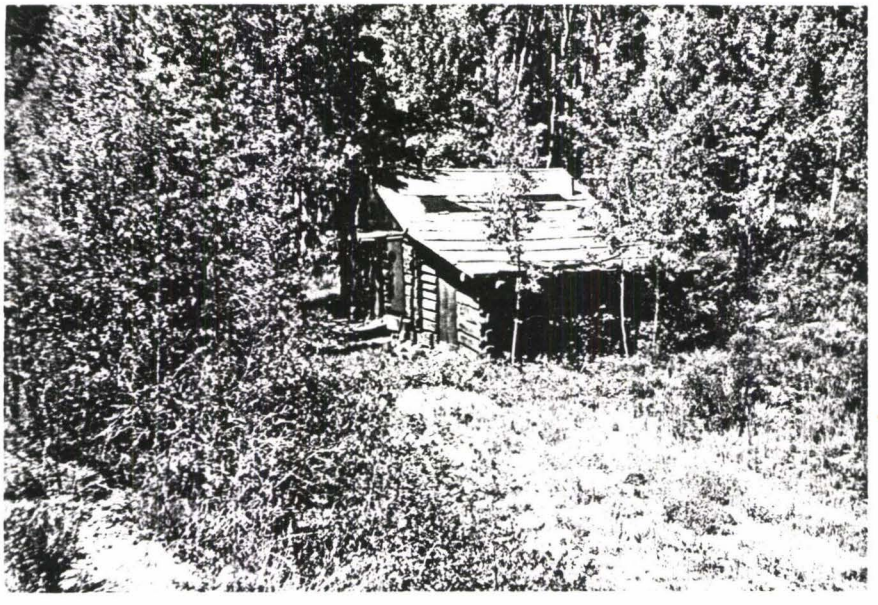
Seasonal Accessibility:

Interpretive Significance:

Attach photograph/illustration

Photographs	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 2 of 3
Site Index No: 7	Site Name: "GATEWAY TO THE PAST" VISITORS STATION (OLD BEAVER CITY TOWNSITE)	





PRESERVED MINERS CABINS AT BEAVER CITY SITE

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 3

Site Index No:	Site Name:
7	"GATEWAY TO THE PAST" VISITORS STATION

Site Location: At old Beaver City townsite approximately 5.6 miles west of Highway 24 on Clear Creek Road.

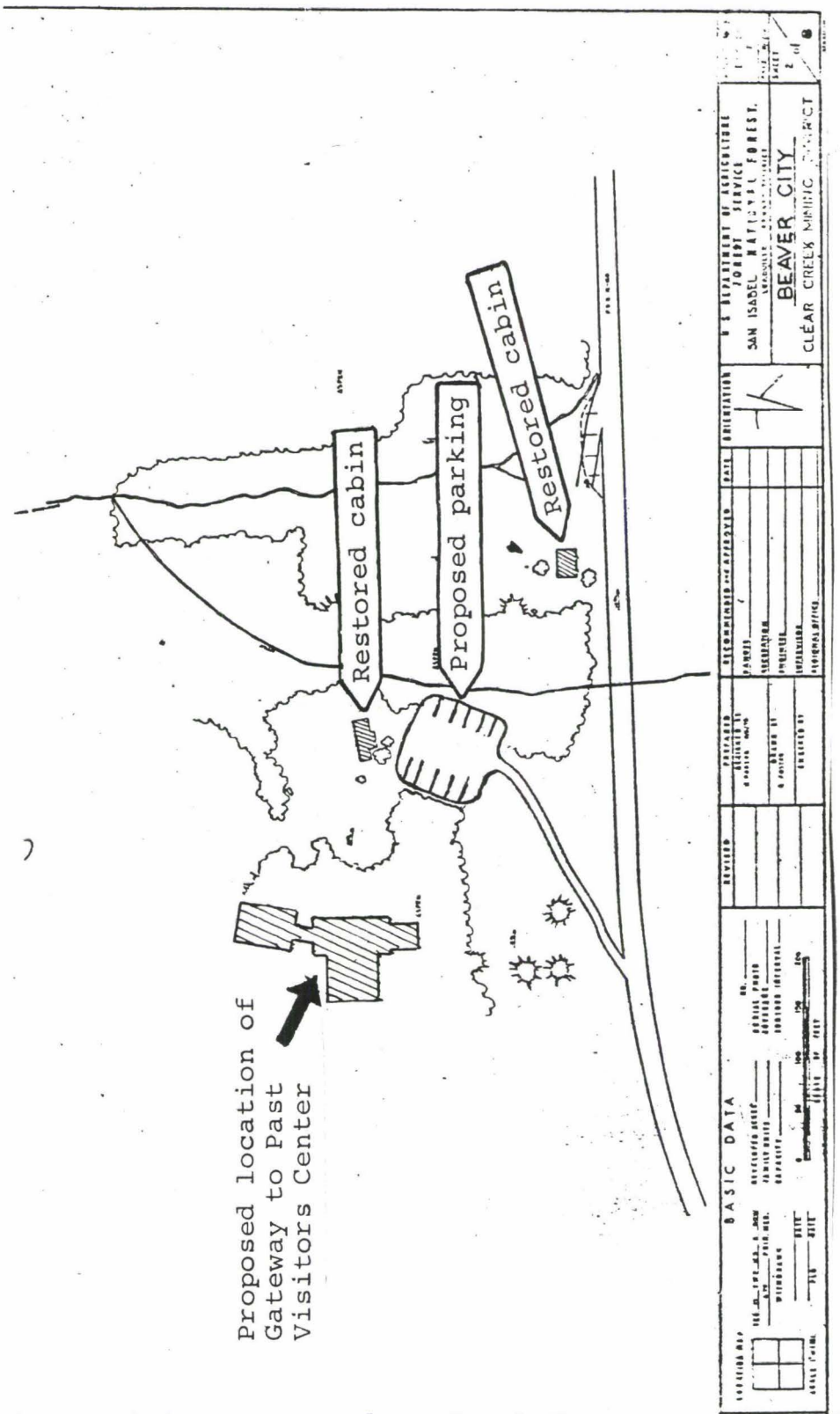
Site Description: There are two restored miner's cabins here that are used by the Clear Creek Historic Society. There is not much else here in terms of significant archeology or history, and thus additional facilities could be sited here without damaging significant cultural resources. There is enough space for a small parking lot, and a possible location for a fairly large building uphill and to the west of the actual townsite.

Seasonal Accessibility:

Interpretive Significance: Beaver City was one of the original settlements in the canyon and was served by the stage from Granite. It is a logical and attractive locatoin for a visitor's center. The restored cabins in themselves are not adequate as primary visitors space, but could be used as auxilliary buildings - for example, as displays along a short interpretive trail from the main visitor's center.

Attach photograph/illustration

Site Plan (draft)	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 3 of 3
Site Index No: 7	Site Name: BEAVER CITY TOWNSITE (PROSPECTIVE GATEWAY SITE)*	



*Plan map from original draft Clear Creek Management Plan (1974)

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 1

Site Index No:	Site Name:
9	PREHISTORIC SCARRED TREES, CAMP

Site Location: adjacent to Colorado Trail approximately 0.5 miles south of Clear Creek Road.

Site Description: There are two culturally-scarred yellow bark ponderosa trees located in a moderate slope area on the south wall of the canyon. This proabably is a camping location for Ute Indian tribe which used the Upper Arkansas area in the early 19th century.

Seasonal Accessibility:

Interpretive Significance: Could be used as a location to illustrate the pre-European human groups that were in the area before the the mining boom and their lifeways.

Attach photograph/illustration

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 2

Site Index No:	Site Name:
10	BELFORD FALLS OVERLOOK AND LOOP TRAIL

Site Location: Accessible from Clear Creek Road approximately 5.6 miles west of Highway 24.

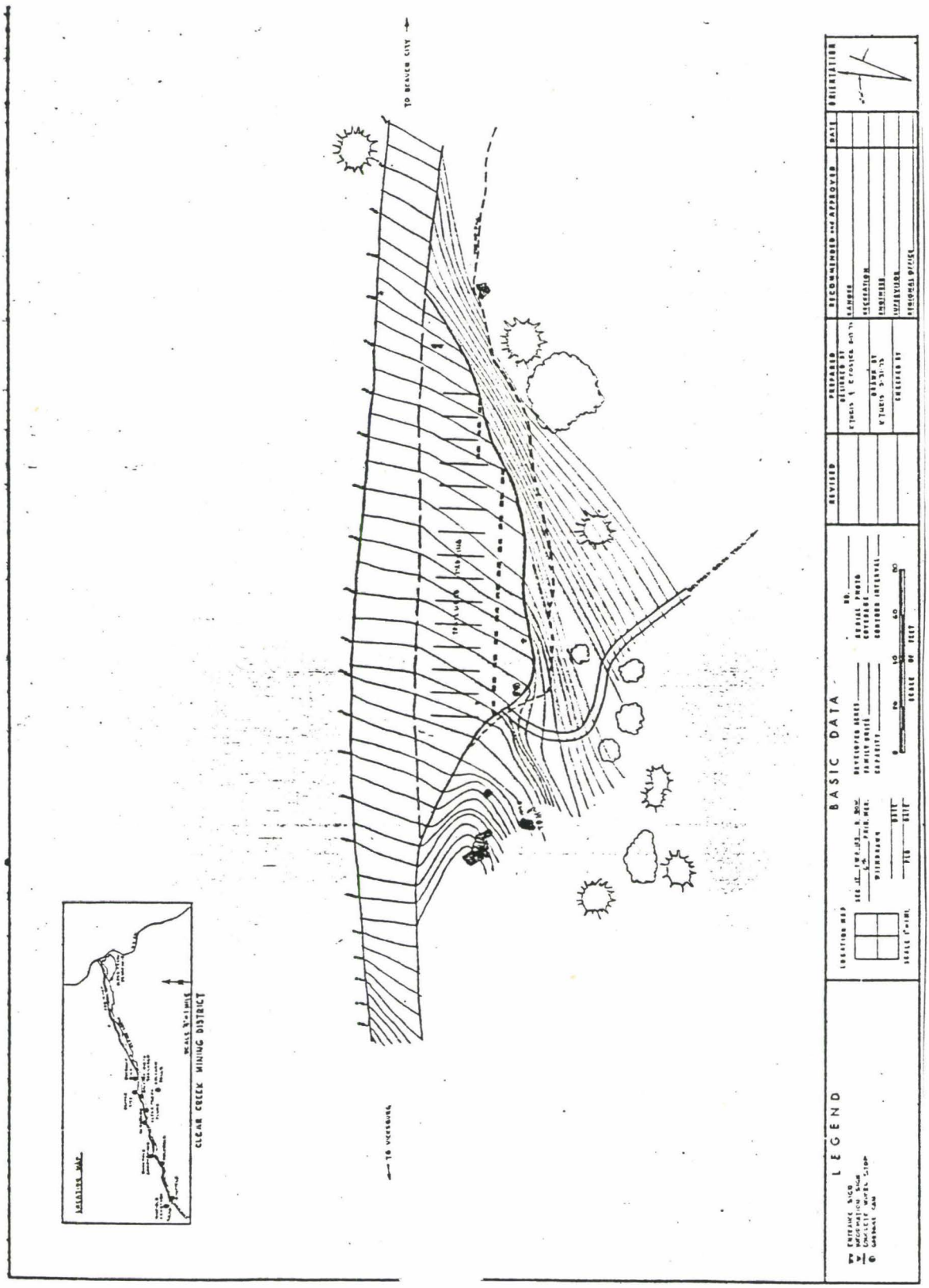
Site Description:

Seasonal Accessibility:

Interpretive Significance: Good location to interpret geology and natural history of area. A place with spectacular scenery and natural communities.

Attach photograph/illustration

Site Plan (draft)	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 2 of 2
Site Index No: 10	Site Name: BELFORD FALLS OVERLOOK AND LOOP TRAIL*	



*Plan map from orignal Clear Creek management plan (1974).

Interpretive Site Inventory

CLEAR CREEK NATIONAL HISTORIC DISTRICT

Page of 1 of 3

Site Index No:

11

Site Name:

CLEAR CREEK FLUME OVERLOOK AND TRAIL

Site Location: Adjacent to Clear Creek Road approximately 6.5 miles west of access to canyon from Highway 24.

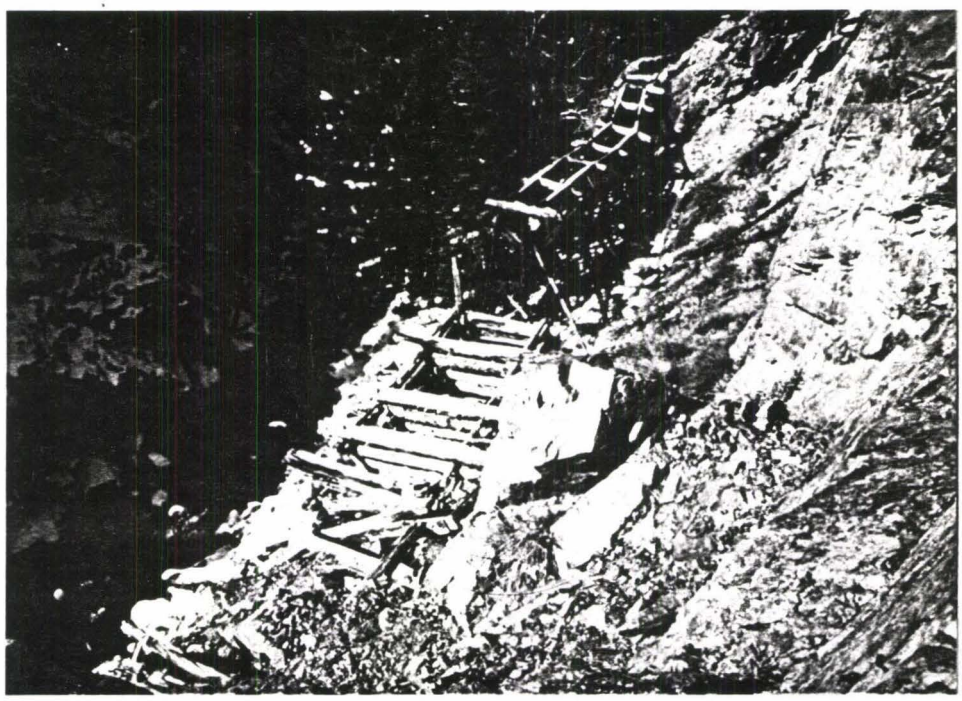
Site Description: This is the site of the intake for the Clear Creek Ditch which funneled water to hydraulic gold mining operations in the Granite area and Lost Creek approximately 5 miles northeast. Water was channeled through a headgate (now vanished) over a short flume and then through a tunnelbefore being ditched on the north side of Clear Creek. Remnants of the ditch also are visible above the townsite of Beaver City.

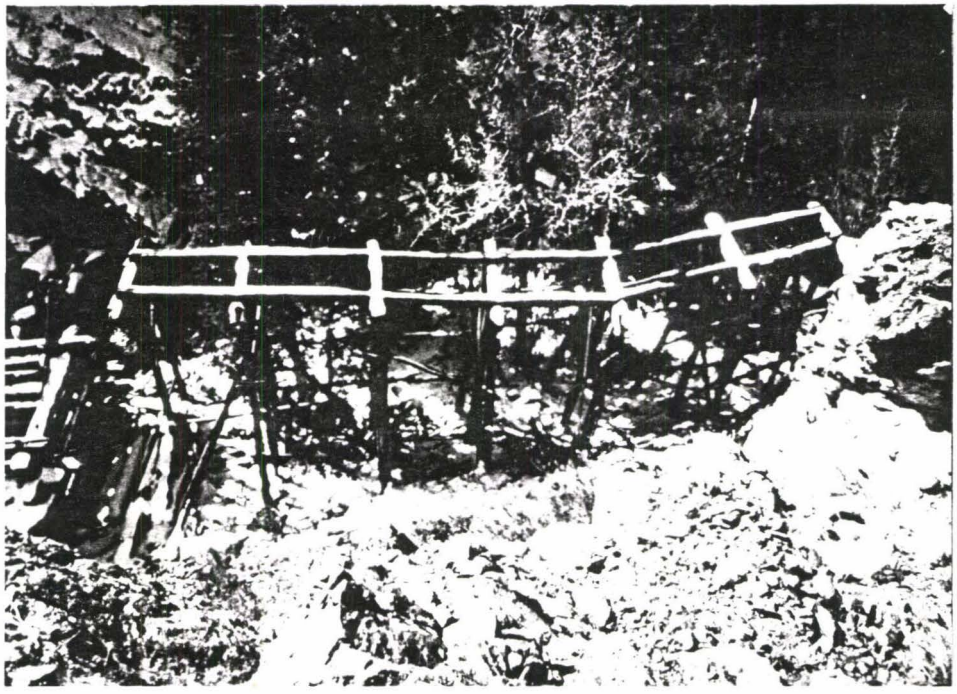
Seasonal Accessibility:

Interpretive Significance: This is a record of gold mining in the area and the methods used, and dates to the decade before the Silver Rush.

Attach photograph/illustration

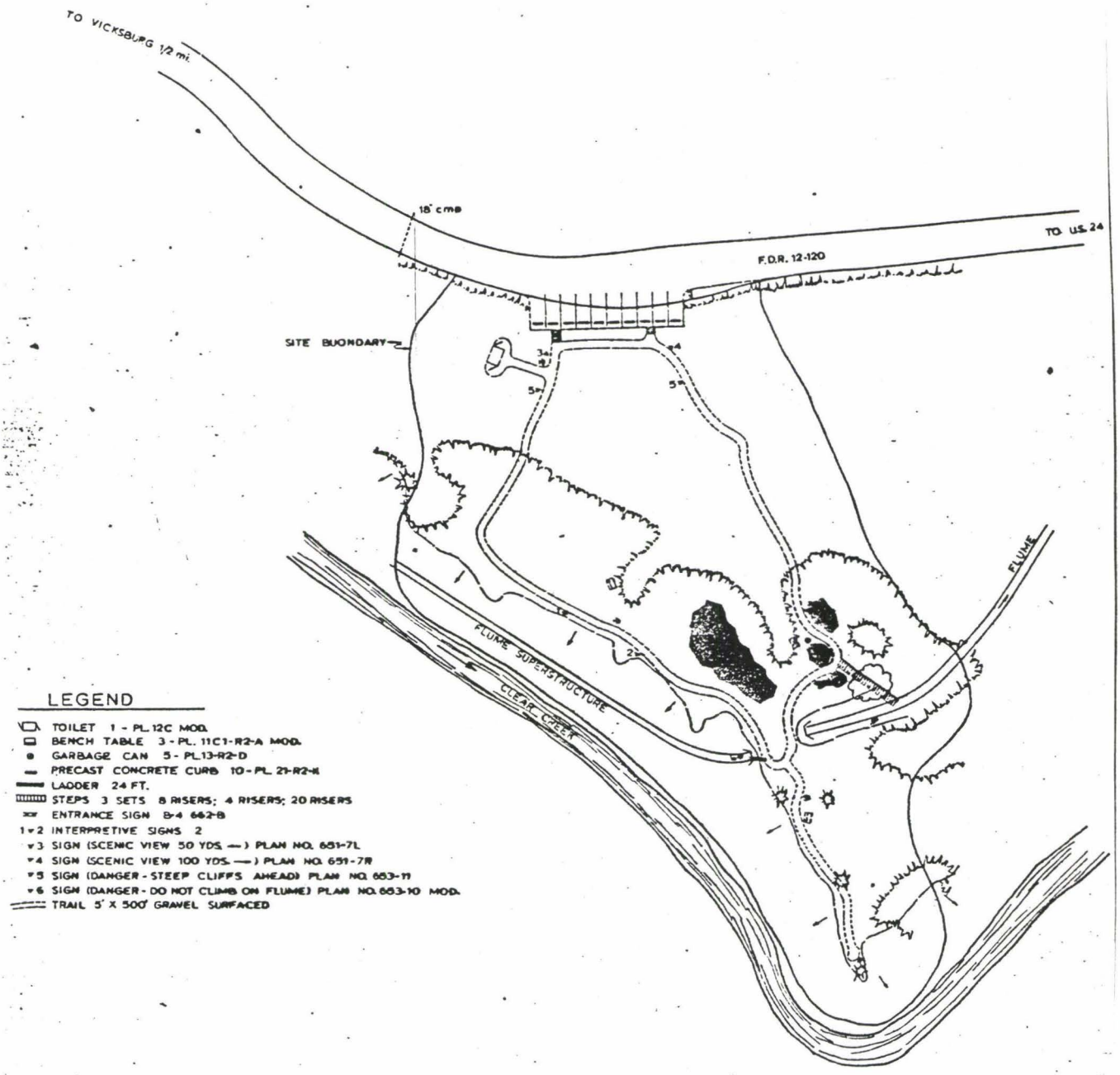
Photographs	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 2 of 3
Site Index No: 11	Site Name: CLEAR CREEK FLUME	





VIEWS OF FLUME FROM NORTH SIDE OF CLEAR CREEK

Site Plan (draft)	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 3 of 3
Site Index No: 11	Site Name: CLEAR CREEK FLUME OVERLOOK AND TRAIL*	


TO VICKSBURG 1/2 mi.
18' cmp
TO U.S. 24
F.D.R. 12-120
SITE BOUNDARY
FLUME
FLUME SUPERSTRUCTURE
CLEAR CREEK
LEGEND
TOILET 1 - PL. 12C MOD.
BENCH TABLE 3 - PL. 11C1-R2-A MOD.
GARBAGE CAN 5 - PL.13-R2-D
PRECAST CONCRETE CURB 10 - PL. 21-R2-K
LADDER 24 FT.
STEPS 3 SETS 8 RISERS; 4 RISERS; 20 RISERS
ENTRANCE SIGN B-4 662-B
1 ▾2 INTERPRETIVE SIGNS 2
▾3 SIGN (SCENIC VIEW 50 YDS. —) PLAN NO. 651-7L
▾4 SIGN (SCENIC VIEW 100 YDS. —) PLAN NO. 651-7R
▾5 SIGN (DANGER - STEEP CLIFFS AHEAD) PLAN NO. 653-11
▾6 SIGN (DANGER - DO NOT CLIMB ON FLUME) PLAN NO. 653-10 MOD.
TRAIL 5' X 500' GRAVEL SURFACED

*Plan Map from orignal Clear Creek management plan (1974).

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 1

Site Index No:	Site Name:
12	MISSOURI GULCH TRAILHEAD/ VICKSBURG CEMETERY

Site Location: On Clear Creek Road approximately 7.2 miles west of access from Highway 24.

Site Description:

Seasonal Accessibility:

Interpretive Significance: The Missouri Gulch Trail is a primary route to the Collegiate Peaks Wilderness and the high country to the south of the canyon. This is a location to provide information on cultural and natural resources in the Wilderness.

Attach photograph/illustration

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 5

Site Index No:	Site Name:
13	VICKSBURG TOWNSITE/ MINING MUSEUM

Site Location: adjacent to Clear Creek Road approximately 7.3 miles west of access point from Highway 24.

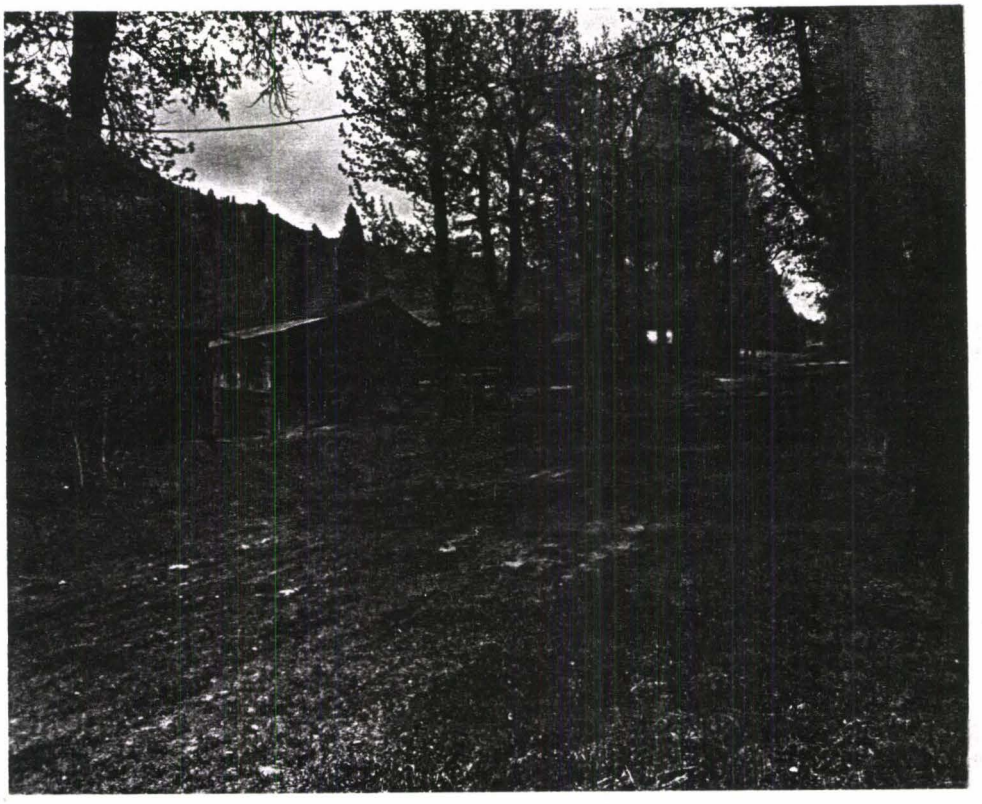
Site Description: Vicksburg is a beautifully preserved record of the Silver Boom frontier. The main street and many of the old miner's cabins are in good repair with virtually no modern intrusions. The main street is shaded by Balm of Gilead cottonwoods planted by the original residents. This pristine setting is reproduced nowhere else to my knowledge and must be protected.

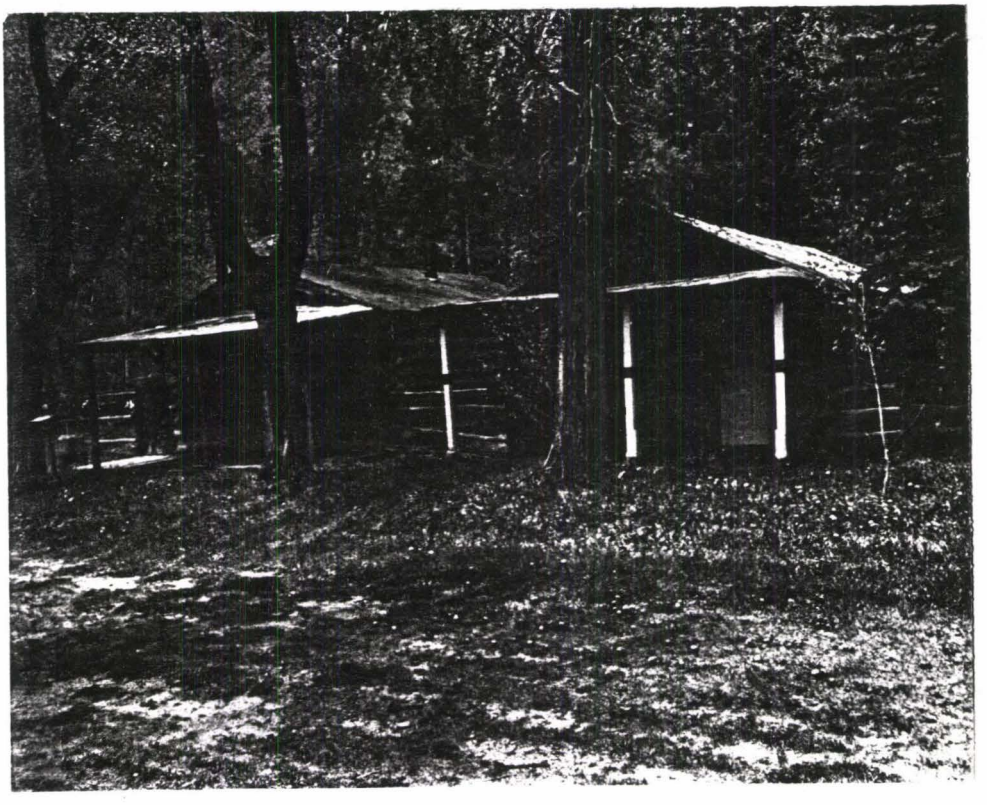
Seasonal Accessibility:

Interpretive Significance: a museum operated by the Historic Society is here; the museum should be supplemented by a self-guided or Society guided walking tour of the town. The tour should include the origin and history of Vicksburg, the layout and businesses of the town in its heyday and the interior of one of the cabins.

Attach photograph/illustration

Photographs	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 2 of 5
Site Index No: 13	Site Name: VICKSBURG TOWNSITE/MINING MUSEUM	



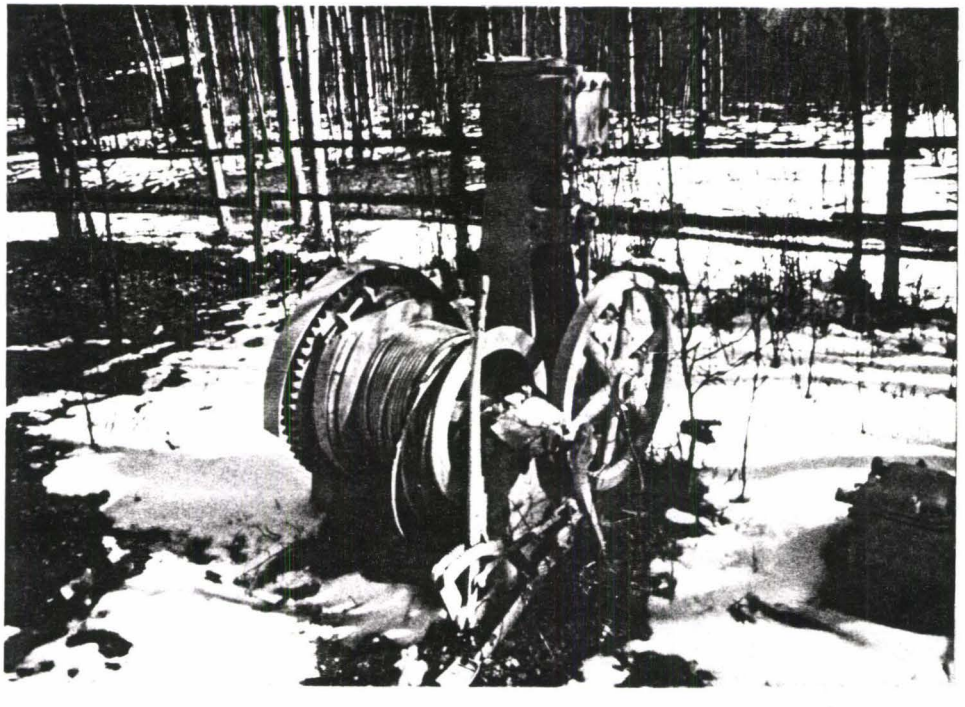


VIEWS OF MAIN STREET AND NORTH SIDE CABINS

Photographs	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 3 of 5
Site Index No: 13	Site Name: VICKSBURG TOWNSITE/MINING MUSEUM	

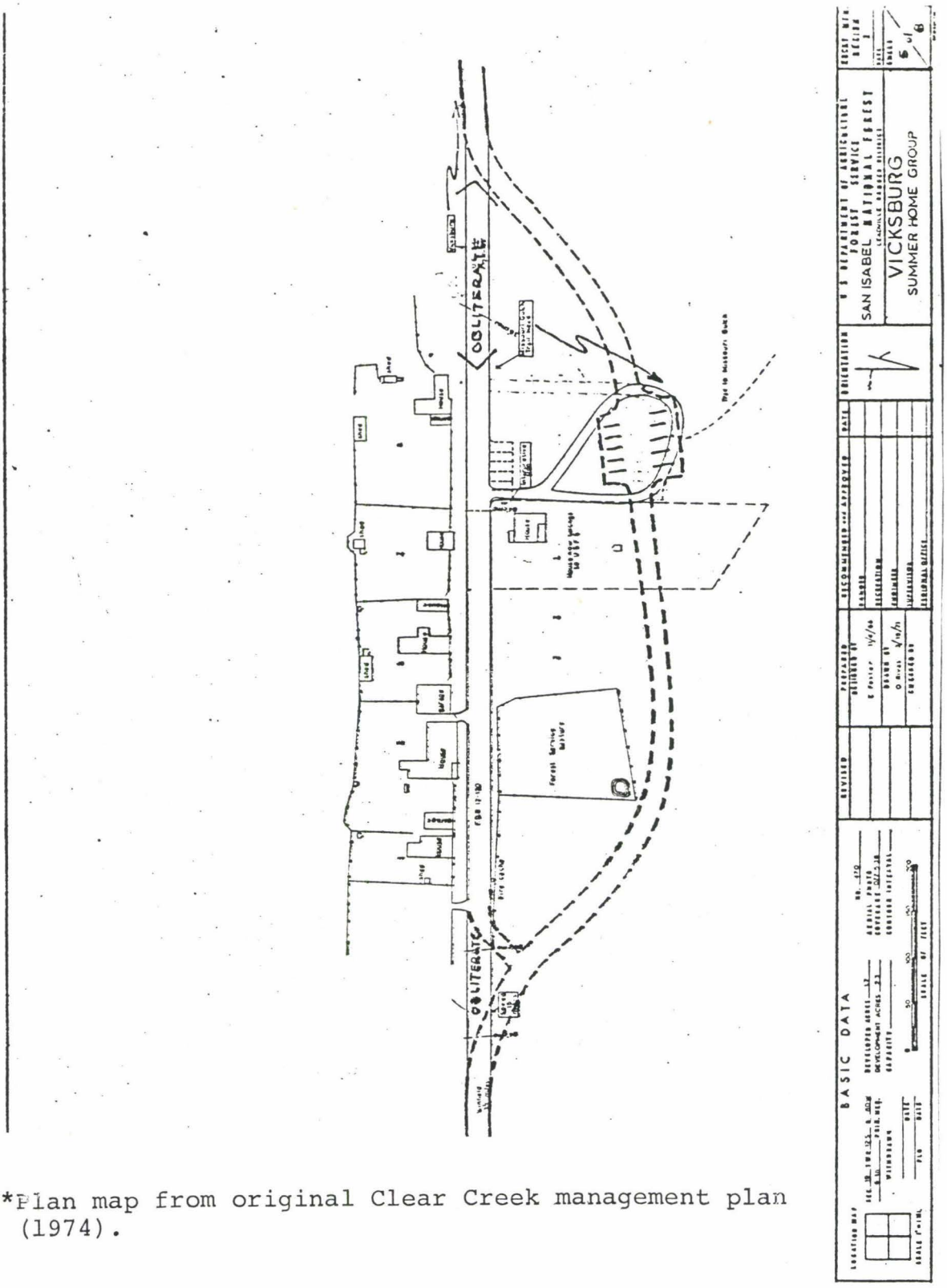
SPECIAL USES SUMMER HOME (TOP), AND VICKSBURG MUSEUM (BOTTOM)

Photographs	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 4 of 5
Site Index No: 13	Site Name: VICKBURG TOWNSITE/MINING MUSEUM	



RESTORED MINING MACHINERY AT MUSEUM

Site Plan (draft)	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 5 of 5
Site Index No: 13	Site Name: VICKSBURG TOWNSITE/MINING MUSEUM*	



*Plan map from original Clear Creek management plan (1974).

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 2

Site Index No:	Site Name:
14	ROCKDALE/ JEEP ROAD - TRAIL TO CLOHESY LAKE

Site Location: South of Clear Creek Road approximately 9.1 miles west of canyon access point from Highway 24.

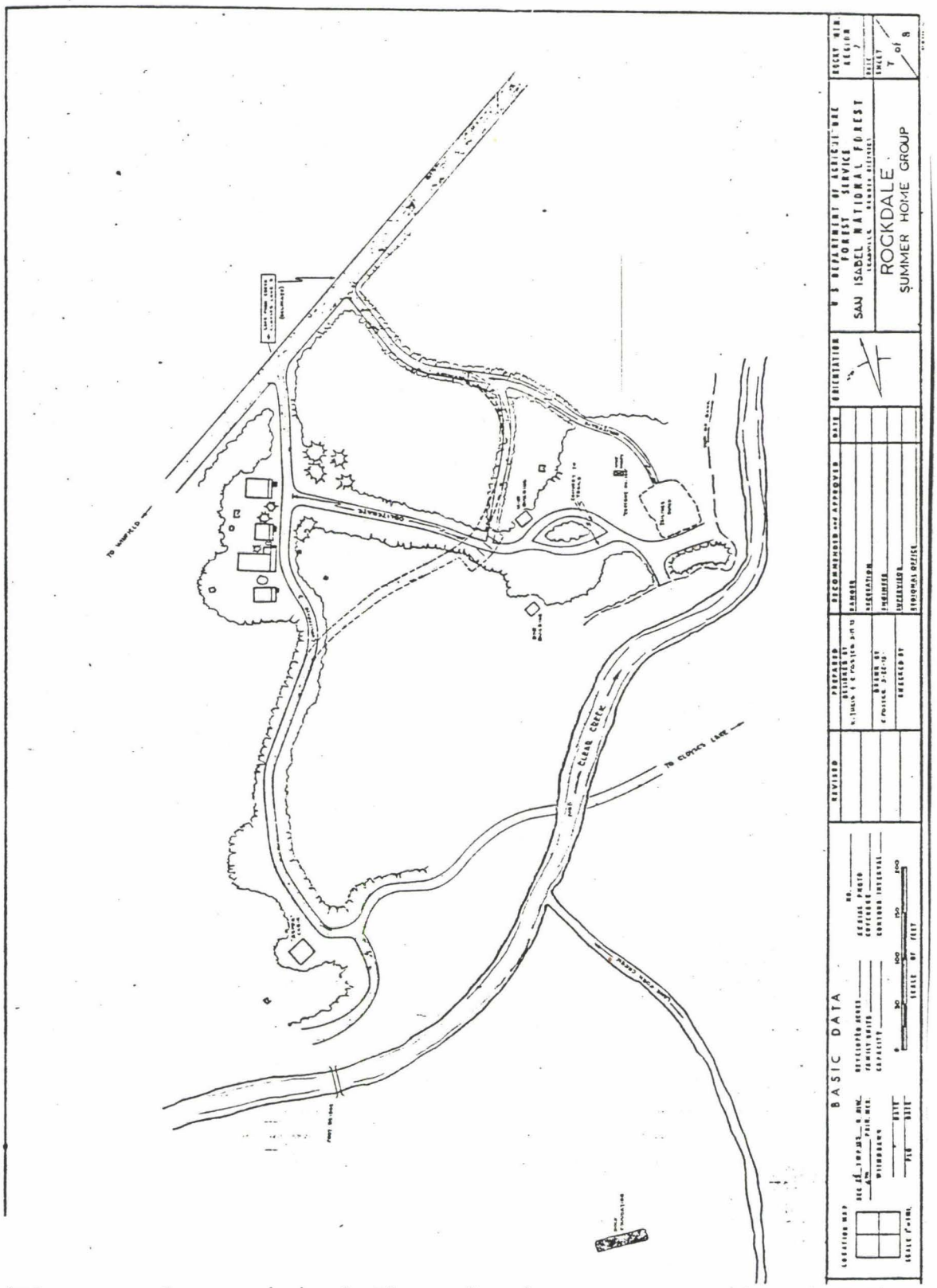
Site Description: There are several cabins here, but they date from the '30's and '40's rather than representing the Silver Boom. This area also provides access to Clohesy Lake, a large private inholding in the area.

Seasonal Accessibility:

Interpretive Significance: Depression Era reworking of some of the mines could be interpreted at this location. The vehicule access in and around Rockdale is confusing; a clear plan should be developed. Also it is recommended that the Forest Service pursue acquiring the Clohesy Lake inholding to preserve the quality of the local historic setting and the Collegiate Peaks Wilderness.

Attach photograph/illustration

Site Plan (draft)	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 2 of 2
Site Index No: 14	Site Name: ROCKDALE/TRAIL TO CLOHESY LAKE*	



*Plan map from original Clear Creek management plan (1974).

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 2

Site Index No:	Site Name:
15,16	SWISS BOY TRAILHEAD/SWISS BOY MINE

Site Location: Adjacent to Clear Creek Road approximately 10.5 miles west of canyon access point from Highway 24.

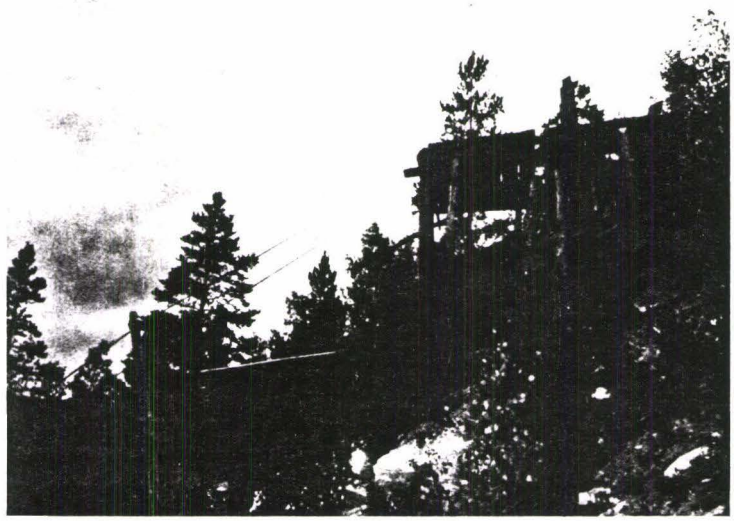
Site Description: The Swiss Boy Mine was one of the major producers of the Clear Creek mining district. Still-preserved are several structures and portions of the tram line that was used to transport ore from the mine to the valley floor.

Seasonal Accessibility:

Interpretive Significance: The Swiss Boy can be used to illustrate Silver Boom mine locations and methods. There is a vehicle track on moderate grade that runs to the mine from the Clear Crrek road; this could be converted into a self-guiding trail with minimal expense. At least one of the shafts at the mine is still open; this should be blocked in the interests of visitor safety.

Attach photograph/illustration

Photographs	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 2 of 2
Site Index No: 16	Site Name: SWISS BOY MINE	



VIEWS OF STRUCTURES AND TRAM CABLES AT MINE SITE

Interpretive Site Inventory

CLEAR CREEK NATIONAL HISTORIC DISTRICT

Page of 1 of 5

Site Index No:

17

Site Name:

WINFIELD TOWNSITE

Site Location: On Clear Creek Road approxiamately 10.7 miles west of canyon access from Highway 24.

Site Description: Most of the old town has been leveled, but several miner's cabins and the school house have been restored. The Winfield cemetery, just west of town, is another potential visitor's draw. Several of the cabins are used as summer home recreation sites; in addition there are several newer cabins which clash with the historic setting, especially one A-frame construction.

Seasonal Accessibility:

Interpretive Significance: A walking tour for the area using the brochure aided self-guiding format should be developed. The old school house could be used as the background for living history events.

Attach photograph/illustration

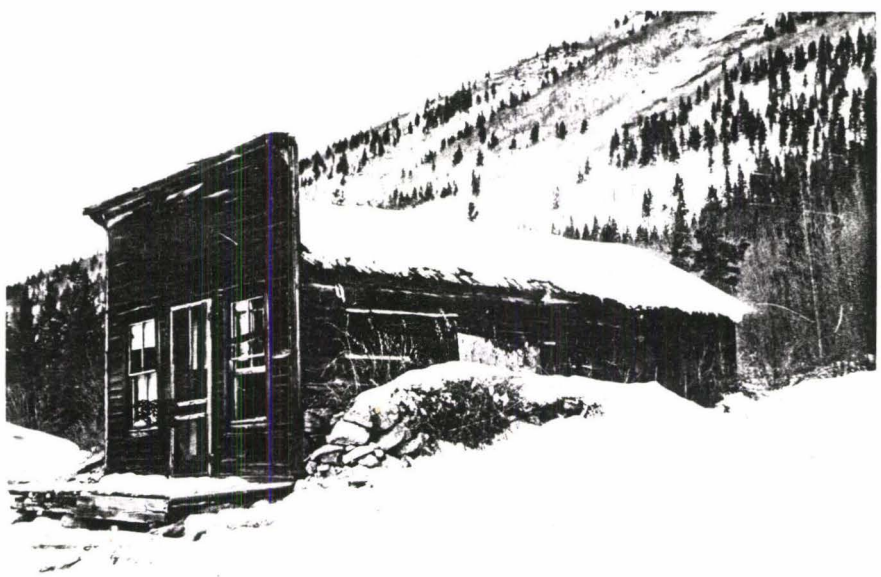
Photographs	Project: CLEAR CREEK NATIONAL REGISTER DISTRICT	Page 2 of 5
Site Index No: 17	Site Name: WINFIELD TOWNSITE	

NOV 1969

NOV 1969

HISTORIC MINERS CABINS RESTORED AS SPECIAL USES SUMMER HOMES

Photographs	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 3 of 5
Site Index No: 17	Site Name: WINFIELD TOWNSITE	



6961 AON NOV 1969

WINFIELD SCHOOLHOUSE, RESTORED BY CLEAR CREEK HISTORIC SOCIETY

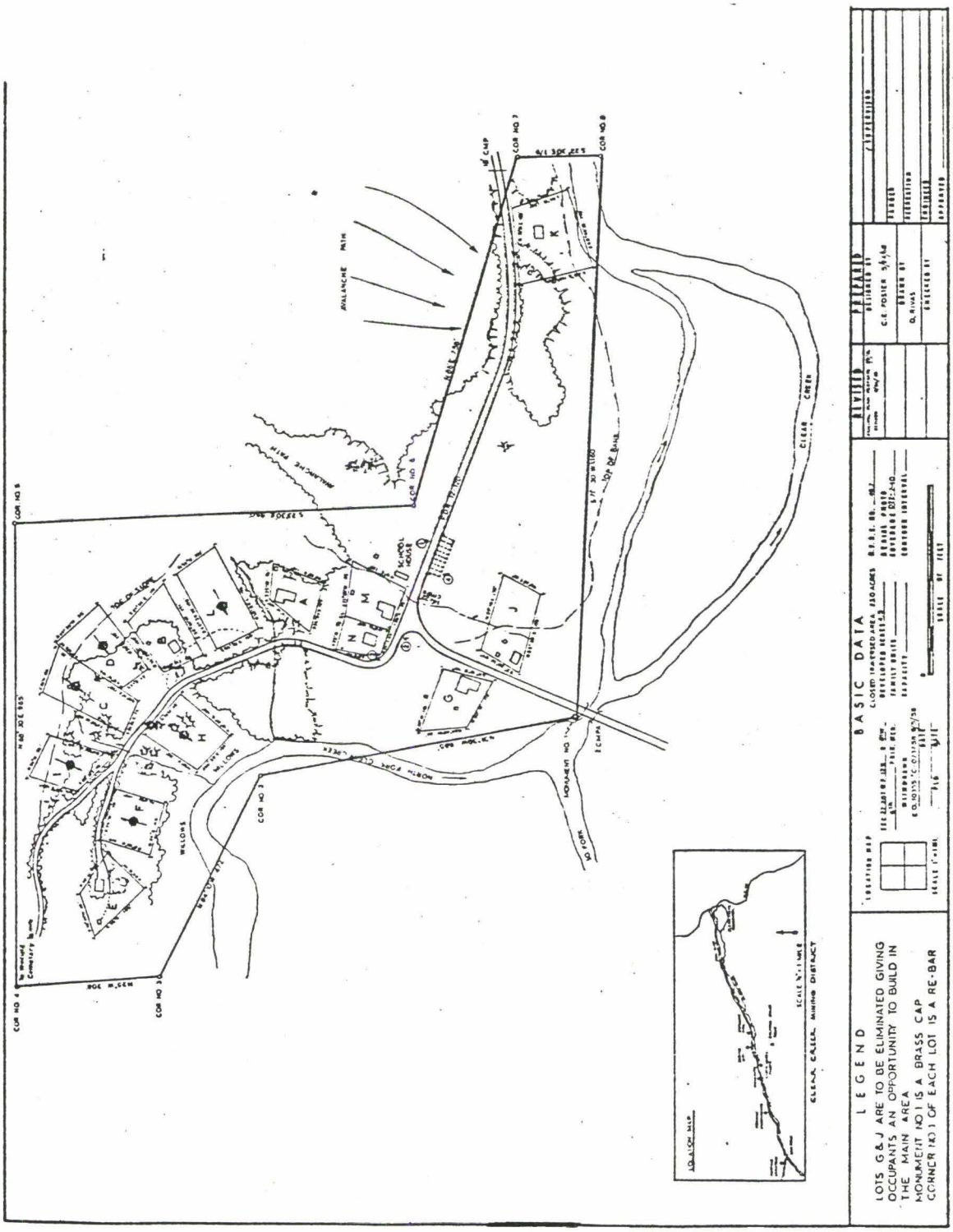
Photographs	Project: CLEAR CREEK NATIONAL REGISTER DISTRICT	Page 4 of 5
Site Index No: 17	Site Name: WINFIELD TOWNSITE	

NOV 1969

NOV 1969

OUT OF CONTEXT MODERN CABINS AT WINFIELD

Site Plan (draft)	Project: CLEAR CREEK NATIONAL HISTORIC DISTRICT	Page 5 of 5
Site Index No: 17	Site Name: WINFIELD TOWNSITE *	


BASIC DATA
LEGEND
LOTS G&J ARE TO BE ELIMINATED GIVING OCCUPANTS AN OPPORTUNITY TO BUILD IN THE MAIN AREA
MONUMENT NO 1 IS A BRASS CAP
CORNER NO 1 OF EACH LOT IS A RE-BAR

*Sketch map from original Clear Creek management plan document (1974).

Interpretive Site Inventory

CLEAR CREEK NATIONAL HISTORIC DISTRICT

Page of 1 of 2

Site Index No:

18,19

Site Name:

SOUTH FORK TRAILHEAD/ BANKER MINE

Site Location: On south fork of Clear Creek Road approximately 1.5 miles south of Winfield and 12.2 miles west of canyon access from Highway 24.

Site Description: The remains of the Banker Mine, a significant producer, are adjacent to the current road, and additional aspects of the mine are located higher on the slope. Hamilton, a former Silver Boom townsite is located a further 1.6 miles to the south in the Collegiate Peaks Wilderness.

Seasonal Accessibility:

Interpretive Significance: The mine could be interpreted by using on-site signing or in a brochure or guidbook. This is also a wilderness trailhead where information regarding cultural resources in the wilderness should be provided.

Attach photograph/illustration

Photographs	Project: CLEAR CREEK NATIONAL REGISTER DISTRICT	Page 2 of 2
Site Index No: 19	Site Name: BANKER MINE	

HISTORIC STRUCTURES AT MINE

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 1

Site Index No:	Site Name:
21, 22, 23	NORTH FORK - WINFIELD PEAK TRAILHEAD/ FORTUNE MINE/ WINFIELD OVERLOOK

Site Location: On north fork of Clear Creek Road approximately 1.1 miles west of Winfield and 11.8 miles west of canyon access point from Highway 24.

Site Description: The Fortune Mine is on the east face of Winfield Peak.

Seasonal Accessibility:

Interpretive Significance: This is a good hiking opportunity; from the mine, one has a spectacular vista of Winfield and Clear Creek canyon. The current access road provides a convenient hiking trail with fairly moderate grades.

Attach photograph/illustration

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 1

Site Index No:	Site Name:
24,25	BLACKBEAR CREEK TRAIL/ TASMANIA MINE

Site Location: On north fork of Clear Creek Road approximately 1.3 miles west of Winfield and 12.0 miles west of canyon access from Highway 24. The Tasmania mine is about 1.2 miles north on the trail.

Site Description: The Blackbear Creek Trail provides an opportunity to enjoy the Colorado high country; the trail traverses boreal forest, krumholtz, and tundra environments. The Tasmania mine is an object lesson in the ephemeral nature of man's intrusion on the wilderness.

Seasonal Accessibility:

Interpretive Significance: The opportunity to experience spectacular high country vistas and cultural resources in a wilderness setting; a chance to explain the relationship between man and the wilderness.

Attach photograph/illustration

Interpretive Site Inventory		Page of
CLEAR CREEK NATIONAL HISTORIC DISTRICT		1 of 1

Site Index No:	Site Name:
27	CACHE CREEK CROSSING/ COLORADO TRAIL

Site Location: On Colorado Trail approximately 1.3 miles north of intersection with Clear Creek Road.

Site Description: There are several Silver Boom cultural resources along this section of the trail, including the remnats of extensive placer and hydraulic mining along Cache Creek.

Seasonal Accessibility:

Interpretive Significance: This is the primary location to interpret hydraulic mining and its lasting impacts on the environment.

Attach photograph/illustration

Interpretive Site Inventory

CLEAR CREEK NATIONAL HISTORIC DISTRICT

Page of 1 of 1

Site Index No:

28

Site Name:

GRANITE TOWNSITE

Site Location: On Highway 24 approximately 2 miles north of intersection with Clear Creek Road.

Site Description: Granite is the nearest town where services and supplies are available; the town also served as the point of supply and transportation for Clear Creek during the Silver Boom heyday. This was a stop on the Rio Grande Railroad, and then incoming passengers could take the stage to Vicksburg, Winfield, or other destinations in the canyon.

Seasonal Accessibility:

Interpretive Significance: A point to explain early transportation and the wider regional setting of Clear Creek.

Attach photograph/illustration

APPENDIX C:

INTERPRETIVE PLAN OUTLINE

I. GOALS FOR INTERPRETATION

A. Provide opportunities and facilities for visitors to discover and experience the rich natural and historic resources of Clear Creek.

B. Stimulate visitor interest in the past and its relevance to the present through interpretive emphasis on the lifeways of the individuals and groups who worked the mines and lived in the Clear Creek boom towns.

1. Research old newspapers to flesh out the detail of the individuals who lived at Clear Creek.
2. Visit the historic sites to correlate the literature with what remains in the historic record, to recreate the original layout of facilities and improvements, and to make an inventory of interpretable resources and their locations.
3. Design and create interpretive materials such as brochures, trail guides, glossy magazines, etc. based on the results of (2).

C. Emphasis the cultural resource site conservation ethic.

1. Through integrating the resource protection message with interpretive displays.
2. By maintaining a visible agency presence in the area to reinforce the perception that site stewardship and US Forest Service management are one and the same.

D. Through development of partnerships with private groups enhance cultural resources related recreation opportunities thereby providing a higher quality experience and improving the economy of the region.

II. INTERPRETIVE THEME: LIVING WITH THE SILVER BOOM

A. The primary interpretive theme will be Living with the Silver Boom. The basic message will stress the hardy and roughshod lives of the miners and their families, and their flexibility in coping with a harsh wilderness environment.

B. Subthemes will include:

1. The history of settlement in Clear Creek and the Upper Arkansas
2. 19th century transportation
3. Personal vignettes of some real historic personages.
4. Shelter, furnishings, and food of Clear Creek, how it differed from the present.
5. Ingenious adaptations to life on the frontier

III. INTERPRETIVE THEME: NATURAL HABITATS AND WILDLIFE OF MONTANE COLORADO

A. A second prominent theme would feature the vegetation and wildlife communities of the Clear Creek area and more generally, the montane environments of central Colorado. The basic message could be the interactions and interdependent of plant and animal species in the diverse communities, from the mountain riparian community along Clear Creek to the tundra communities.

B, Subthemes would focus on particular species including the elk, bald eagle, mountain sheep, aspen, etc.

IV. INTERPRETIVE THEME: GEOLOGY OF THE SAWATCH RANGE AND THE ARKANSAS VALLEY

A. A third theme would be geology including the basis hardrock geology of the area and the interactions between geology and climate fluctuations.

B. Subthemes include (1) the geology of precious metals in the area, and (2) 19th century technology for extracting these metals.

V. THE CUSTOMERS

A. Provide interpretive facilities and displays for the range of visitor segments and their diverse interests. Consider the needs and desires of special populations (the disadvantaged, the elderly, children, etc.) when developing the interpretive plan. Construct barrier free interpretive facilities and displays.

IV. STRATEGIES FOR INTERPRETATION

A. An integrated , multi-tiered approach will be used to interpret the cultural and natural resources of the Clear Creek area. The emphasis will be on facilitating visitor access to and enjoyment of attractions by providing a variety of opportunities and experiences. The strategy consists of several basic components.

B. "Gateway to the Past" Visitor Station.

C. Use an approach focusing on unobtrusive on-site interpretation. On-site interpretation should provide a range of experiences including "discovery" opportunities. Interpretive signs, waysides, brochures, self-guiding trails, etc., will be used to provide free access, unrestricted experiences.

1. Consider self-guiding tours using brochures, audio tapes and radio receivers augmented by more detailed glossy pamphlets.
2. Provide opportunity for guided visits.

D. Provide scale of challenge (easy, moderate, difficult), provide sites and opportunities for disadvantaged, including physically-challenged and visually impaired. Work with special population organizations to achieve these goals.

V. GATEWAY TO THE PAST VISITORS STATION

A. Design the station to be compatible with the historic setting. Conceptualized the station as a modern oasis in the 19th century wilderness of mining frontier Colorado. Provide the following products at the station: interactive exhibits, opportunities and diversions for children, interior and exterior rest areas, an auditorium, a souvenir shop, administrative area for volunteer organization. Present the wider Upper Arkansas perspective here as well.

VI. SITES CONSIDERED FOR INTERPRETATION/DEVELOPMENT

A. Refer to listing of sites included in Appendix B.